News From CCE

By Barb Neal, CCE Tioga

Happy March! March is maple syrup season, and that means a sweet time visiting one of our local maple producers on Maple Weekends. Make a family memory and bring your kids or grandchildren to a maple sugarhouse this month—the kids will love it! Last year, I was bitten by the sugaring bug and I have 12 trees tapped and hope to start boiling soon.

Want to learn about seed starting or how to grow unusual fruit as well as strawberries, blueberries and raspberries? Check the next page for local classes. Winter is the time to learn more about gardening and farming so you can bring your new knowledge to the 2020 growing season.

I hope all of you take a few minutes to read the article about the dairy industry. Dairy farming is our biggest agricultural sector in the Southern Tier. It is in all of our interests to keep our local dairy farmers profitable.

I hope, too, that all of you will participate in the 2020 census—the more our counties have a complete enumeration, the more money and political power will remain or flow to our area.

Cheers!
For more specific information about the Chemung County Master Gardener program, please contact Jingjing Yin at 607-734-4453 or 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.

Homesteading and Gardening Classes in Tioga County

The popular Homesteading Series is back for 2020! I am still booking up some workshops but here are some of the upcoming workshops:

March 7   9 am to 10:15   Growing Small Fruit in the Home Garden
Strawberries, blueberries, and other small fruit are some of the tastiest foods you can grow in a home garden. In addition, eating berries is great for your health! Come to this workshop to learn all about growing these wonderful fruits. You will learn about the best varieties to grow in your garden, how to prepare the soil for the berries, planting, growing and winter care. Roger Ort, CCE Schuyler, is an expert on growing fruit for the home garden.

March 7 10:30 am to 11:30 am   Growing Unusual Fruit
Do you want to be the envy of your gardening friends? Serve them a fragrant Russian quince straight from your tree. Have you ever heard of medlars or shipovas? Interested in growing unusual fruit in your own garden? Then join us for expert Roger Ort, CCE Schuyler, for a fun-filled introduction to growing exciting fruits. Many of these fruits have a long and storied history--but are simply overlooked in American gardens. Start a new tradition!

March 21  9:00 AM - 10:15 AM   Raising Laying Chickens
Have you been thinking about getting your own small flock of laying hens? Layers not only provide wonderful fresh, healthy eggs for your table, but they eat garden bugs and are fun to watch! Come to this one hour presentation and learn about having a flock of your own.

March 21, 2020, 10:30 AM - 11:30 AM  Raising Meat Chickens
Did you know that you can raise a freezer full of healthy, farm-fresh chicken in about two months, start to finish? Have you been thinking about raising meat chickens? Then this presentation is for you! Learn how to order chicks, start them right and then raise them so you get plump, delicious chicken for your table.

April 11, 10 am to 11:30 AM   No Till Gardening
Are you interested in building up your soil’s capacity to grow beautiful vegetables but don’t want the task of annual tilling? Join us and learn from gardening guru Jen Cramer how to have a wonderful no-till garden.

All classes are $5 per person, and children and CCE Tioga volunteers can attend at no cost. Classes are at 56 Main Street in Owego in the CCE Tioga conference room.

Please call CCE Tioga’s office at 607-687-4020 to register for the classes. We prefer you register so we can contact you in case of inclement weather.

Workshop in Chemung County

Workshop: Seed Starting
March 25, 2020; 2:00 – 3:00 PM. Starting your own seeds is a cost effective way to grow a greater variety of plants for your garden. Join Cornell Cooperative Extension of Chemung County to learn how to start seeds successfully. The topics we will cover include techniques for starting seeds indoors, proper care, lighting and watering, and how to prepare your seedlings for transplant.

Speakers: Jingjing Yin, Horticulture Educator at CCE of Chemung County and Chris Gagliardo, Chemung County Master Gardener

Place: CCE Chemung, Conference Room (Room 110). 425 Pennsylvania Avenue, Elmira, NY

Workshop fee: Free, but a $3 suggested donation helps support our Horticulture Program. Please register with Chemung CCE at 607-734-4453, or jy578@cornell.edu.
Dog Strangler Chokes on Caterpillar

By Paul Hetzler, CCE St. Lawrence

The invasive plant that our Canadian neighbors call dog-strangling vine doesn’t harm pets, but it lives up to its name as a strangler, choking out native wildflowers as well as forest understories, Christmas tree plantations and hay fields. Its canine-throttling moniker isn’t just a nickname—its genus name, Cynanchum, actually means dog strangler.

Better known in the US as swallow-wort, biologists and agronomists have been losing sleep over this Eurasian native. While there are two species, pale and black swallow-wort, they cause the same problems and are often found growing together, so it only makes sense to lump the two together.

It is a twining perennial vine with glossy lance-shaped leaves growing opposite one another on the vine. It’s actually in the milkweed family, and has seed pods similar to those of milkweed, though much more slender. For pictures of swallow-wort, go to http://www.sleoinvasives.org/about-invasives/target-species/swallow-wort/

Swallow-wort thrives in almost any soil type and has a prodigious root system that is toxic to other plants. It quickly forms dense monocultures that in some cases become hundreds of acres in size. Wait—there’s more. Dog-strangling vine is so poisonous that no North American bird, mammal or insect will eat it. But because it’s a relative of milkweed, monarch butterflies will lay eggs on its leaves. The unfortunate result of this is that their caterpillars die after consuming swallow-wort. It is unusually good at making and dispersing seeds, and it bounces back from most herbicides.

So it’s with much relief that researchers at the University of Rhode Island announced they’ve recently located and vet-
ted a worthy opponent. While swallow-wort has withstood mowers, rototillers, flame throwers (true) and potent agrochemicals, it’s no match for this brute. At a tenth the weight of a paper clip and a fraction of an inch long, our hero is Hypena opulenta, the larva of a Ukrainian moth.

In its native range, swallow-wort is just another well-behaved native plant because the tiny green Hypena opulenta caterpillar, along with other insects, keep it in check. In fact, Carleton University biologist Naomi Cappuccino, a Canadian researcher who went to Ukraine with URI scientists to look for biological controls, said they had a hard time locating any swallow-wort; it was that scarce.

Finding biological controls for an exotic invasive plant is no easy task, and requires traveling to the plant’s home environment to make field observations in all kinds of conditions. But once an insect, pathogen or vertebrate is identified, the real work begins.

Many years of quarantine with carefully controlled trials are required to make sure a potential hero won’t end up going over to the Dark Side and doing more harm than good, which has happened in the past. Cane toads, imported to Australia as a supposed beneficial, have become a plague of Biblical proportion there, disrupting ecosystems in ways never imagined by those who introduced them.

Our would-be champion caterpillar isn’t yet approved for release in the US, but in Canada 500 Hypena opulenta larvae were released near Ottawa in September 2013 in a cold-hardiness trial, which they passed. The hope is that we’ll have a success story like the recent one with purple loosestrife, in which biological controls stopped it from taking over freshwater wetland ecosystems. Even if Hypena opulenta performs admirably, it may be a decade or more before we see the decline of the dog-strangler.

To paraphrase Princess Leia, “Help us, Hypena opulenta; you’re our only hope.” (Thus far, at least.)
U.S. Dairy Consumption Trends in 9 Charts


The recent bankruptcies of dairy processors Dean Foods and Borden Dairy highlighted challenges within the dairy industry. Downward trends in dairy consumption, mainly milk, was frequently cited as a significant factor. In light of all this, this week’s post is a look at U.S. dairy consumption trends.

Trending Higher – Butter and Cheese

Figure 1 shows the U.S. annual per capita consumption of butter. After more than three decades between 4 and 5 pounds, consumption exceeded 5 pounds in 2011. In 2018, the USDA reported consumption at 5.8 pounds per person. Compared to 2001, when butter consumption was at a low of 4.3 pounds per person, per capita consumption in 2018 was 33% higher, increasing at an average annual rate of 1.6%.

Another bright spot for dairy has been cheese consumption (Figure 2). Since 1975, annual consumption has increased from 20 pounds per person to 40 pounds in 2018. The doubling in nearly 45 years is equal to a 1.7% average annual rate of increase.

Cheese is admittedly a broad category. Figure 3 breaks down 2018 U.S. cheese consumption. First, there are two major categories of cheese reported by the USDA: American cheese[1] (shown in shades of blue) and Italian cheeses (in shades of green). These two categories each accounted for 41% of the cheese consumed. Within the broad categories, mozzarella (32%) was the most popular, edging out the cheddar cheeses (30%).

Figure 4 shows the cheddar versus mozzarella battle since 1995. Before 2000, cheddars were the most popular. Since 2010, however, mozzarella has maintained the lead.
**Trending Lower- Fluid Milk, Yogurt, Ice Cream**

Perhaps the most cited U.S. consumer trend chart is the per capita consumption of fluid milk (figure 5). It is dramatic. Since 1975, Americans have reduced consumption by more than 40% (247 pounds in 1975 to 146 pounds in 2018). The decline is equal to a 1.2% average annual rate of decline. While that rate is not necessarily large, the persistence of the decline over nearly five decades is most significant.

Adding another layer to shifting consumer preferences, figure 6 shows annual fluid milk sales of the four largest categories. Before 2009, the trend had been less whole milk, more 2% (especially before the 1990s), more 1%, and more skim milk (especially during the 1990s). However, over the last decade, these trends have flipped. Whole milk sales have turned higher for the first time in decades. Furthermore, sales of 2%, 1%, and skim milk have all contracted.

![Fluid Milk Consumption, Per Capita](image1)

*Figure 5. U.S. Consumption of Fluid Milk, Per Capita. 1975-2018. Data Source: USDA ERS.*

![U.S. Milk Sales, by Type](image2)

*Figure 6. U.S. Fluid Milk Sales, by Type (Whole, 2%, 1% Skim). 1975-2018. Data Source: USDA ERS.*

Continued on next page
Figure 7 captures the decline in per capita ice cream consumption. The change has been mostly limited to ‘regular’ ice cream, declining from 18 pounds annually to less than 12. Reduced-fat ice cream, with steady consumption over time, has been mostly immune to declines.

Another dramatic observation in dairy consumption has been the recent about-face in yogurt. After decades of steadily increasing per-capita consumption (at an average rate of 5.2% from 1975 to 2014), yogurt consumption has contracted in the last five years. Specifically, annual per capita consumption fell from 14.9 pounds per person (2014) to 13.5 pounds (2018).

The Big Picture

While consumption trends have varied across specific dairy products, it is worth considering overall, total dairy consumption. In figure 9, the total per capita dairy consumption of dairy, on a milk-fat milk-equivalent basis, is shown. These data account for the milk-fat content of each dairy products and provides a measure of how many total pounds of milk (based on milk-fat) are consumed. In other words, this measure is a way of aggregating up dairy consumption across all products (butter, yogurt, etc.).

Total per capita dairy consumption in the U.S. can vary from year to year, but since the mid-1990s, the trend has been higher. Although consumption has plateaued in recent years, consumption in 2018, the most recent data point, is the highest since 1975.

Wrapping it Up

Trends come in all shapes and forms. In some cases, trends can be easily overlooked because they are slow rates of change that play out over decades. On the other hand, consumption trends can also abruptly change. Yogurt is an example of both; decades of momentum suddenly contracting.

Overall, the dairy industry is primarily driven by slow rates of changes unfolding over several decades. Over nearly 40 years, per capita consumption has trended higher for butter and cheeses. At the same time, the consumption of fluid milk and ice cream has trended lower. Overall, however, the consumption of all dairy products has trended higher. As consumer trends continue to unfold, expect even more changes in the supply chain: grocery store displays, processing, and, eventually, at the farm-level.

Click here to subscribe to AEI’s Weekly Insights email and receive our free, in-depth articles in your inbox every Monday morning.
Energy Saving Programs for Farms & Farmers

1. NYSERDA Agriculture Energy Audit Program
   - Free energy audits to farmers (NYSERDA pays contractors over $1,000) to help identify ways to save energy and money.
   - Lighting, refrigeration, cooling, heat pumps, biogas, solar—possible areas of study
   - → Apply online or printed form to NYSERDA

2. USDA Rural Energy for America Program (REAP)
   - Grant covering 25% of cost of energy efficiency or renewable energy improvements, as well as loan guarantees
   - → Apply through local USDA office

3. NYSEG Rebates
   - Rebates for HVAC systems, steam traps, controls and thermostats, boiler and chiller tune-ups and more
   - → Mail in paper application to NYSEG

4. Solar Incentives
   - Federal solar tax credit covers 26% of cost; additional NYSERDA rebate
   - Can be combined with USDA grant (see above)
   - → Get quotes from solar contractors

More Programs & Information
- Additional programs for residential audits, heat pumps, solar installations, etc.
- Personalized help available from energy advisers. Contact Karim Beers at (607) 272-2292 or go to www.smartenergychoices.org.
Tioga County Prepares for Upcoming 2020 Census

By Megan Griffiths, Tioga County Economic Development and Planning

The United States 2020 Census will start counting all Americans this spring. Tioga County’s Complete Count Committee has committed to making sure that all residents of Tioga County will be counted in the upcoming census. Tioga County has seen a decline in population during recent years, therefore it is important to count everyone in the county to understand what our current population is. Knowing how many people reside in Tioga County will have numerous benefits, including:

1. **Political Power**—if New York State has an undercount of residents of just 62,000, the state will lose 2 representatives in the United States Congress. Counting everyone will make sure New Yorkers’ voices are heard.

2. **Dollar Power**—allocation of federal funding at every level, including state and local, is dependent on how many people are counted in the census. And undercount could mean less dollars for Tioga County residents in terms of local emergency services, county and municipality disaster recovery, and more.

Tioga County residents should provide the address they live and sleep at most of the year. All people who reside in the household should be listed on the form, including children. During the first census mailing, there will be the option to fill out the census either online or by phone. All personal data submitted on the census form is individually confidential and protected by federal law.

If you have any questions, please contact Megan Griffiths, Tioga County Economic Development and Planning at 607-687-8263 or griffithsm@co.tioga.ny.us.

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**WE COUNT IN TIOGA COUNTY!**

The United States 2020 Census is coming and responding is important because...

- Reapportionment of our elected officials’ districts at the national, state and county levels are based on the decennial census 100% population count.
- Nearly $700 billion in federal funding is allocated annually to states, municipalities, school districts and non-profit organizations based on the decennial census 100% population count. $73 billion is allocated to NYS.

To ensure our voices are heard for political representation and federal funding, it is essential that a resident from every Tioga County household complete and submit the US 2020 Census Form on April 1, 2020 and be counted.
Get Your Sweet Tooth On!

**Maple Weekend is coming! (Actually, two weekends-Sweet!)**

March 21 & 22 and 28 & 29, 2020 from 10am-4pm each day, **Sweetrees Maple Products** will have their sugar-house open for tours, demos, and tastes of their delicious maple syrup and other maple products! You can find them at 761 Glen Road in Berkshire (near West Creek Rd.) Dress for the weather if you would like to take a tour of the sugarbush to see the miles of tubing that brings our sap into the sugarhouse. Enjoy a warm drink and a cookie in the sugarhouse while you learn about the process to make our yummy syrup. You can also sample a variety of our many maple products! It’s free and great fun for the whole family! Call 315-481-4060 (best#) or 607-657-8674 for more information.

March 21 &22- Pancake breakfast at the Speedsville VFD; 8-11am; (Fresh Maple syrup donated by Sweetrees Maple!)

March 28- Northern Tioga SAPpening in Berkshire: Pancake Breakfast (8-11) @ Berkshire VFD (Ladies Auxiliary); SAP Run/ Walk (9:00 start/register @8am @ Berkshire Community Hall or online @ www.northerntiogachamber.org); Craft fair (8am-1:30pm) @ Berkshire Community Hall (benefit Helping Hands Food Pantry); Family Crafts (9am-2pm) @ Berkshire Free Library; Sweetrees Maple Open House 10am-4pm; Chicken BBQ @ Sweetrees by Newark Valley VFD (noon ‘til gone!) Check our website: www.sweetreesmaple.com for more information!

**Welcome to NY’s Maple Weekend**

Sponsored by the NYS Maple Producers’ Association March 21-22 & 28-29, 2020

During Maple Weekend, maple farms across New York State invite visitors to their “sugar houses” to experience firsthand how pure, mouth-watering maple syrup and other related products are made. Visitors also have the opportunity to enjoy fun, family-friendly activities, taste New York’s freshest syrup and purchase maple products.

Join us this year for sugar house tours, samples, activities and much more.

Create a new family tradition—go mapling!

Here is a link to the NYS Maple website to locate local maple syrup producers who are open for tours on Maple Weekend https://mapleweekend.nysmaple.com/maple-weekend-sugarmakers/

**Come join the Tholhill Farm Family for our Maple Syrup Weekend!!**

March 21, 10 am to 6 pm 493 Catatonk Hill Road, Candor, NY

- Live Demonstration of the Evaporator with a full explanation from the Maple Master
- Kids learn how to tap a Maple tree the old fashion way with a drill and bucket system
- Free Maple themed treats and snacks:
  - Maple Syrup
  - Maple Bacon Chicken with a Maple Mustard
  - Maple Cotton Candy
  - Maple cookies
  - Maple Coffee and Tea

And much more!

Maple Syrup, Maple coffee, Maple Tea and Maple Soap will be available for sale during the event!
The NYS Hemp Industry – 2020 Update

By Kitty O’Neil, Ph.D. North Country Regional Agriculture Team

The hemp scene in NYS is a big, awkward, 4-year old. To date, the hemp industry has been a rapidly changing system of growers, processors, buyers, customers, researchers and regulatory agents – each with growing pains. As a whole, the NYS hemp industry is administered and regulated by the Plants and Natural Resources Division of Ag & Markets and they’ve done an excellent job of quickly translating dynamic political progress into order, regulations and guidance. Hemp first became a legal research crop in the US as a result of the 2014 Farm Bill. NYS changed its rules to permit hemp more widely in 2016. The 2018 Farm Bill made further improvements by removing hemp from the list of federally controlled substances and providing a framework for states to begin handling hemp as an agricultural commodity.

First, a bit about hemp, the plant. Industrial hemp (Cannabis sativa, L., ≤0.3% THC) is a very close relative of marijuana (’0.3% THC). It’s an annual herbaceous flowering plant native to eastern Asia but is found worldwide. Wild types are even found in NYS.

Humans have used cannabis for many purposes throughout our history – its fiber, seeds, oils, and psychoactive properties. Thousands of years of selective breeding has produced varieties with widely different traits and which are suited for widely different parts of the world and for distinct uses.

Many varieties of hemp are dioecious - with distinct male and female individual plants. Other varieties are monocious, meaning one plant has both male and female flowers. Differences between male and female plants and flowers are important - male plants are often smaller and their flowers do not produce grain. Because of this impact on growth and yield, some varieties have been developed to be ‘all female’ with just a few male plants for pollination.

For high CBD yield, unpollinated, bushy, widely spaced female plants with many flowers are desired, while grain and fiber hemp crops include both male and female plants and are planted much more densely, producing tall slender plants. Pollination of a CBD crop reduces CBD yield, so attention to male plants, wild plants and neighboring crops is necessary because hemp is wind-pollinated. Seed set on grain crops is typically indeterminate, meaning that seeds continue to develop and mature over an extended period of time – resulting in both mature and immature seeds on the same seed head at time of grain harvest. Typically, hemp is a short-day plant, meaning flowering is triggered when hours of daylight shorten to a critical point regardless of plant size, though some autoflowering, or day-neutral, varieties are available.

Recommended cultivation practices for hemp production vary as widely as the preceding details, therefore the best place to start with hemp production is with a buyer contract. We always recommend starting with a contract before planting any hemp because there is not a reliable open market for hemp. Processors and buyers can specify their requirements – whether biomass for CBD extraction or partially dried stems for fiber processing, or dried grain for food uses – and the grower can then backwards-plan site selection, growing methods and sourcing seeds, equipment and correct input materials.

Hemp prefers fertile, well-drained soils with pH 6.5 to 7. A good hemp crop needs high fertility, similar to wheat or corn. Seeding rates range from 1500 to 1.2 million seeds per acre.

Many insect pests and pathogens cause problems for hemp. Some common pests are armyworm, Japanese beetles, European corn borer, Sclerotinia white mold, Botrytis gray mold and Fusarium. Hemp also attracts unique and new pests.

Currently, 86 pesticides are approved for hemp in NYS, all are unrestricted, and most are fungicides and insecticides. There are ZERO selective herbicides on the list. For all types of hemp, beginning with a weed-free field is recommended, which requires good weed management for a 2-3 years prior to hemp crop. If planted in a timely manner, hemp can suppress weeds well, however weeds are often problematic for late-planted crops or in weedy fields. To look up approved products for hemp in NYS, access the NYSPAD database compiled on the NYS DEC website. Link is listed at the end of this article.

Harvesting methods are also specific to the type of crop grown and its intended use. Specifically tuned or designed grain combines, mowers, chopping heads, balers, grain dryers and other equipment is commonly used. And CBD crops are often manually cut, transported and dried in open sheds or by large fans. Harvesting methods and timing as well as storage and drying requirements and methods may be specified by processors or buyers and should be very carefully researched before planting a hemp crop. Many hemp buyers will gladly provide guidance and advice to contracted growers for all these details.
Before buying seed or planting any hemp in NYS, a permit application must be submitted to and approved by NYS Ag & Markets Plants and Natural Resources Division. A link to this application information is included at the end of this article. This Ag & Markets website is also the best access to up-to-date changes to the NYS Industrial Hemp program, which has changed frequently as the federal laws and application submission rates have changed. Currently, applications are being accepted for growing hemp for any purpose. The application and agreement is called a ‘Research Partner Agreement’ under the present system. Once your application is submitted, along with $500, and approved, your permit allows hemp production, per the details in your agreement, for 3 years. Your agreement will list background checks, inspection, testing, auditing and reporting requirements. Provisions for sub-contracting may or may not be available. A list of 617 already-permitted growers and processors is also available on the Ag & Markets Industrial Hemp website and is also linked below. This list may be a good way to start to find a potential buyer for any planned hemp crop.

The NYS hemp industry is a rapidly growing network of growers, processors, manufacturers and market. Like any new and not-yet-matured industry, it is unstable, unbalanced and beset with risks.

In 2017 and 2018, processors competed aggressively to purchase raw hemp materials from growers. In 2019, raw hemp production far outpaced processing capacity and many Northeast growers are still left with unsold biomass. Many fields were not even harvested in 2019.

The hemp industry surely offers opportunity for NY farmers and entrepreneurs, but be aware and cautious. Attend some of the many conferences and workshops offered on hemp methods and regulations around the state and learn everything you can. Line up a buyer contract and apply for a permit before any farming begins.

Lastly, Cornell is actively researching many aspects of all types of hemp production and processing and shares results on a website listed below. Among the info available at the Cornell website are variety trial results, economic and cost-of-production analyses for different types of hemp, hemp industry news and upcoming events around the state.

**Additional resources:**


New York State Department of Agriculture and Markets, Plants & Natural Resources Division, Industrial Hemp website. [https://agriculture.ny.gov/industrial-hemp](https://agriculture.ny.gov/industrial-hemp)


Cornell University Hemp Research Projects, Results, News and Events. [https://hemp.cals.cornell.edu/resources/our-research/](https://hemp.cals.cornell.edu/resources/our-research/)

For more information about field crop and soil management, contact your local Cornell Cooperative Extension office.
Matt Murphy, Son of Tina Murphy, of CCE Tioga Featured in Good Fruit

Editor’s note: Many of you know longtime CCE Tioga staff person, Tina Murphy. What you might not know is that Tina’s son, Matt, is a home-grown talent. Read this interview, published in Good Fruit magazine, written by T. J. Mullinax. Here is the link to the story and video: https://www.goodfruit.com/matt-murphy-a-young-grower-from-geneva-new-york/

family background / Matt is a first-generation tree fruit grower and graduated from Cornell University with a degree in viticulture, enology and plant sciences. He’s a farm manager at Red Jacket Orchards and is the son of Tina and Marty Murphy.

grower / Geneva, New York
age / 27
crops / Apples, stone fruit and cherries
business / Red Jacket Orchards

How did you get your start?
I grew up spending most of my summers on my grandparents’ farm and I got interested in agriculture when our family started a pumpkin business. Once out of high school, I pursued a degree from Cornell University.

Why did you pursue viticulture?
I knew I wanted to go to school for agriculture, and Cornell had a new viticulture program.

Grape growing and winemaking sounded very interesting because our family spends time around the Finger Lakes region, and there’s a lot of new wineries around.

When I learned about the new major, I decided to pursue it. It’s very much a horticulture-based degree, with part of it covering winemaking. I stayed focused on the viticulture and plant sciences tracks. The opportunity to go to Cornell, which is about an hour from where I grew up, seemed like a great idea as well.

What is it like growing in the Finger Lakes area?
The Geneva area is very heavy in field crops with corn and soybean as the dominant product grown. The Finger Lakes have a great microclimate for various fruits, allowing some farms to grow stone fruit — it’s one reason why the vineyards are planted around the lakes.

One of the main challenges that we face in the Finger Lakes is labor, because many farms used to rely so much on the local labor force. Over the past four years, that issue has pushed our company toward using the H-2A program.

We started with 20 workers, and we’ve doubled that number since. It’s a very expensive program to be involved in. Another challenge is working with the weather and climate change. We ended up without a stone fruit crop two years in a row when we lost our fruiting buds.

In the past, even in the worst weather, we would end up with some crop. But having back-to-back years takes a toll on farms.

What are you learning since joining the industry?
The industry and the market have rapidly changed with the increase of fruit varieties. It seems if you aren’t planting the top new varieties and putting them into high-density blocks, then your farm is falling behind.

Some of the things I didn’t know before joining the industry was how big of a learning curve it would be to be successful. At Red Jacket, we don’t just do one crop, we’re very diverse. I’ve had to learn fast because of how much I need to know about those crops.

Over the years I’ve learned to not spread myself too thin and work in too many different areas.

What resources have you found to continue learning?
I’ve gained so much knowledge while being part of a group like the International Fruit Tree Association. With them, I’ve been able to learn from Washington growers, learn about techniques such as growing tall spindle systems and high-density orchards.

These events also provide opportunities to network and work with other young growers. It’s especially valuable when you hear similar stories about their day-to-day challenges.

Even if the people you meet are from New York, New Zealand or Canada, getting that feedback and problem-solving with other growers is huge.

What’s your advice to those new to growing tree fruit?
I’d say learning patience is a pretty important skill because sometimes things are going to happen that are out of your control and you’ll probably not know how to deal with it right away.

Learn to take things day by day. I value the expression, “How do you eat an elephant? One bite at a time.”

—by TJ Mullinax
Late blight: Playing ‘Russian Roulette’ in your garden with potatoes

Planting potatoes in your garden this season is a lot like playing Russian Roulette. True, the chances that the seed potato you plant will be infected with late blight are slim. (Less than one in 100 for the potato, compared to one in six for the revolver.) But late blight is such a contagious and devastating disease of tomatoes as well as potatoes that you have to ask yourself: Are a few home-grown potatoes worth the risk of killing all your tomatoes, not to mention the possibility of spreading the disease to other gardens and farms?

There are valuable steps that that you can take to reduce the risk of bringing late blight into your garden on potatoes, but it is important to realize it is impossible to eliminate the risk completely. The most important step: Plant certified seed potatoes, rather than potatoes saved from last year’s garden or purchased at a grocery store. You should also destroy any volunteer potatoes that may have sprouted from tubers unharvested last season or in the compost pile.

Certification does not mean there will be no blighted tubers in the lot, however. The late blight pathogen has been detected this year in some seed potato lots. The incidence is well below the tolerance of 1%. Is that a low enough probability to be worth taking the chance?

The next step is to thoroughly examine tubers and only plant those that appear healthy. However, symptoms of late blight on the surface of a tuber can be difficult to identify and infested tubers may not have any surface symptoms at all.

There is concern that seed potato tubers harboring a so-called tomato genotype (strain) are more likely to be a source of the pathogen for plants than seed potatoes with a potato genotype. Tomato genotypes, which are more aggressive on tomato than potato, have been responsible for most late blight outbreaks on tomato recently, most notably in 2009. Seed potatoes infected with the tomato genotype are less likely to rot in storage overwinter, and their sprouts are less likely to be killed by late blight as they emerge.

Is it better to only grow tomatoes in your home garden, thereby avoiding this risk, and turn to local farmers for the next best thing to a home-grown potato? Farmers generally have more experience managing late blight in potatoes than gardeners do. And, like medical doctors, they have access to more effective ‘medicines’ for this disease (e.g. fungicides) because they have completed the training required to use them.

Passing on potatoes this season will reduce the risk of late blight developing in your garden, but it does not eliminate this risk because the causal pathogen produces spores that are dispersed easily by wind. If windborne spores land on tomatoes, late blight almost certainly will develop as conditions are often favorable (humidity at least 90%) while the spores are alive.

There are additional steps you can take to minimize the possibility of late blight killing tomatoes in your garden. There are now tomato varieties with resistance to late blight. And there’s now a nationwide late blight tracking system so that gardeners and farmers can monitor where this disease is occurring in the U.S. (Visit:http://usablight.org). Gardener participation in the reporting system will be critical. Some of the first occurrences in 2010 were in gardens. Also, project researchers will want samples to identify the responsible pathogen’s genotype.
News, Notes and Workshops for Tioga and Chemung County Farmers and Gardeners

Spring Ag Training Announced by Chemung County Planning and the County Ag and Farmland Protection Board

The Chemung County Planning Department and the Chemung County Agricultural and Farmland Protection Board will be hosting a spring training on March 17, 2020 at the Big Flats Community Center. The event will run from 10a.m.-2.p.m. and is open to Ag Boards, Municipal Officials and others. Eligible participants will receive 2 hours of pesticide credits, and a light lunch.

**Hemp as an Agricultural Crop** 10:00 a.m. – 10:45 a.m. (45 min)

This talk will serve as an overview of current regulations, including the permits application process for growing hemp. Research updates will be including regarding varieties and agronomic and horticultural needs for growing hemp for grain, fiber of CBD. Additionally, an overview of pest issues including weeds, diseases and insects and options for their management will be discussed. Cultural practices and low toxicity, low impact crop protectants that have been approved by the NYS DEC will be discussed.

**Herbicide Resistant Weeds at our Doorstep and their Management** 10:45 a.m. – 11:30 a.m. (45 min)

Tall water hemp, Marestail and Palmer Amaranth are problem weeds at our doorstep or arrived to varying degrees. This talk will highlight cultural practices to slow their spread, herbicides and their timing for control. Best practices for slowing weed resistance development will be reviewed including mixing herbicide families and being cognizant of efficacy of selected herbicides on weed species.

**Lunch Break** 11:30 a.m. – 12:00 p.m. (Light meal and refreshments provided).

**Pesticide Record Keeping**

This discussion will provide DEC requirements for record keeping and reporting requirements for permit holders and manufacturers.

**Succession Planning and Farmland Protection Updates and Grants**

The Chemung County Agricultural and Farmland Protection Board will be eligible to update the Farmland Protection Plan in 2021. This conversation will include the status of the current plan, succession planning, the agricultural inventory and future goals of the plan.

To RSVP, please email Nan Moss at the Chemung County Planning Department nmoss@chemungcountyny.gov by Saturday, March 7, 2020.

**Grafting workshop**

March 12th- 6:00pm-8:00pm-Learn how to save and reproduce fruit for the future. Take home two grafted apple trees. Held at Human Services Complex in Montour Falls, NY OFA CAFE. Fee is $35 per person, space is limited so pre-registration online with full payment is required. Please call Roger at 607-535-7161 or visit cceschuylер.org/events. Contact Roger Ort with questions 607.535.7161 or email rlo28@cornell.edu

**Perry Production**

March 18th- 6pm-8:30pm- Perry is an alcoholic beverage made from fermented pears, similar to the way cider is made from apples. John Reynolds will teach workshop attendees all about Perry production. Held at the Human Services Complex in Montour Falls. Contact Roger Ort with questions 607.535.7161 or email rlo28@cornell.edu

**Know Your Roots**

March 23rd 6-8pm- Transitioning Conventional Perennial Crops to Organic and Beyond!!

March 23rd-Thinking of transitioning an apple orchard and perennial fruiting system from conventional system to an organic/holistic/biodynamic system? This workshop with Mike Biltonen (Know your roots) will focus on the biodynamics practices needed to complete that successful transition. Brought to you by Cooperative Extension of Schuyler County. Held at the Human Services Complex in Montour Falls in room 120. Contact Roger Ort with questions 607.535.7161 or email rlo28@cornell.edu

**Backyard Fruit Production**

March 28, 2020, 8:30 AM - 12:00 PM. Held at Reisinger Apple Country at 2750 Apple Lane in Watkins Glen NY. Spend the morning learning about pruning and growing apples,peaches, cherries, plums and pears. This workshop will also cover growing small fruits such as red raspberries and blueberries. Fee is $20 per person and pre-registration is required by March 26th. Workshop will be rain, snow or shine so please dress for the weather! https://reg.cce.cornell.edu/BackyardFruit2020_244 Roger Ort 607.535.7161 rlo28@cornell.edu

**New Tools Available to Help Farms Manage Overtime Regulations**

On January 1, 2020 New York farms will have to pay overtime wages for nearly all employees that work over 60 hours a week. Researchers and extension educators from Cornell University have developed several tools to help New York farms manage through these changes, including spreadsheets and worksheets.

https://agworkforce.cals.cornell.edu/regulations/overtime/
$35 for two people.

Disaster Aid

On January 29, 2020, U.S. Secretary of Agriculture Sonny Perdue designated many Southern Tier Counties as disaster counties due to losses caused by excessive rain that occurred during the 2019 crop year. Farmers or ranchers that own or operate land in the Southern Tier Counties are eligible for emergency loans to help them recover from production and physical losses due to the excessive rain. Farmers or ranchers who have suffered at least a 30 percent loss in crop production or a physical loss to livestock, livestock products, real estate, or chattel property due to the disaster condition are eligible. To learn more about emergency loans and other eligibility criteria visit https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2019/emergency-loan-program.pdf or contact the Farm Loan Department (located in Bath, NY) at 607-776-7398 x-2.

The New York Center for Agricultural Medicine and Health (NYCAMH) is offering financial assistance to farm operations for repairs and upgrades that help make for a safer workplace. Funds of up to $5,000 are available on a first-come, first-served basis to applications approved through the John May Farm Safety Fund. For additional information, to download an application or to see videos of funded projects, go to https://www.nycamh.org/programs-and-services/john-may-farm-safety-fund.php, call 800-343-7527 or email at jmfsf@bassett.org <mailto:jmfsf@bassett.org>.

Attention: Gardeners: Creation of a new American Rose Society Chapter!

There are many gardeners who grow roses or would like to grow roses in the Finger Lakes and Southern Tier who would be greatly served by having a local chapter. A local club would provide opportunities for meeting gardeners throughout our region, learning about growing roses, and visiting private and public gardens featuring roses. The counties in our region could include: Broome, Chemung, Schuyler, Seneca, Steuben, Tioga and Tompkins. If you are interested, please contact me. It would be great to have our first meeting sometime this winter. Lee Ginenthal, Der Rosenmeister Nursery derrosenmeister@gmail.com 607-351-1336

Backyard Biodiversity: Enhancing Habitat on Your Property

March 7 – 11am – 2 pm

Just in time for planting, come to the Waterman Center to learn about ways to make your property more wildlife friendly! Whether you have a sidewalk strip or 40 acres, you can use what you learn from 3 different presenters from Cornell Cooperative Extension to support the official New York State Bird, the Eastern bluebird, attract and feed pollinators, and benefit wildlife in general.

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

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, Che-
nango, Delaware Counties. Contact gminer@redec.us

**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)

**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).

**Buffer in a Bag**

The 2020 Buffer in a Bag application period is now open!

Through the Buffer in a Bag initiative, NYS DEC’s Trees for Tribs Program and the Colonel William F. Fox Memorial Saratoga Tree Nursery provides landowners with a free bag of bare-root tree and shrub seedlings to enhance the streamside area on their property. Each bag of seedlings is made up of a variety of native trees and shrubs chosen specifically to improve streamside areas in New York by supporting wildlife and improving water quality.

**Who is Eligible**

Anyone who owns or manages at least 50 feet of land along a stream or waterbody in New York State is eligible to receive a free bag of seedlings. Applicants are limited to one bag per property. All participants must provide photos and information indicating where the trees will be planted.

There is a limited supply and recipients are selected first-come, first-served. Not sure if your site fits these criteria? Contact the Trees for Tribs program by calling (518) 402-9405 or emailing treesfortribs@dec.ny.gov.

**What is Included**

Each bag includes 25 bare-root native tree and shrub seedlings, approximately 1 to 2 feet in height. All species are well-suited to streamside conditions and are native to New York.

Each bag also comes with support materials including: a Planting and Maintenance Guide, and Planting Layout Instructions. These guides will help you ensure that your trees and shrubs get off to a good start. Proper maintenance will create a healthy riparian buffer for flood resiliency, wildlife habitat, and improved water quality.

**How to Apply**

Submit a Buffer in a Bag application with all required documentation to treesfortribs@dec.ny.gov or via mail to:

NYSDEC, Division of Lands and Forests
Attn: Trees for Tribs Coordinator
625 Broadway, 5th floor
Albany, NY 12233-4253

All submissions must be submitted by 04/10/2020. Buffer in a Bag kits are sent to selected applicants in late April or early May. If you have questions, please email treesfortribs@dec.ny.gov or call the Trees for Tribs Program at (518) 402-9405.

Recipients should expect to be contacted in roughly 5 years to submit progress pictures of your buffer's growth and to provide information about the success of your streamside buffer.

Join us as we kick off our “Ask the Experts” series with Coughlin & Gerhart on Tuesday March 7th! They will be discussing the typical business structures a farm or agricultural enterprise might consider and the pros & cons of each. There will be a concurrent session on estate planning as well. Then we will hear from the Small Business Development Center at Binghamton University on their FREE consultation services to help you create, or update, your business plan, marketing plan or anything in-between!

Those who attend all four sessions will work through all the sections of the business plan. Our March 17 session will focus on: Finding Your Target Customer & Branding. March 24th will focus on: Basic Farm Accounting & How To Read Financials.

All sessions take place on a Tuesday evening, 5:30pm start, in the Agricultural Development Center on the CCE Broome County campus. Each week we bring in an expert in their area to discuss a topic and then we dive deeper into a template business plan so you can relate it back to your own enterprise. More information can be found [here](#) to register. Veterans can register for FREE.
Farm Bureau is not just for dairy farmers! If you have any type of farm: beef, sheep, nursery, hemp, etc., think about joining Farm Bureau. Farm Bureau is YOUR advocate for farming issues!!

Maintaining a strong agriculture community and ensuring a vibrant future for Tioga County’s Rural Landscape

NYFB Members Save With Our Business Partners

NYFB Accidental Death & Specific Loss Coverage
NYFB Workers Compensation Safety Group 486

JOIN TODAY!
2020 membership dues—$99

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