

June 2021

## News From CCE

*By Barb Neal, Ag and Horticulture Educator for Tioga County*

Hi folks! Well the weather has certainly kept our head spinning: cold then hot then cold again but dry, then rain and now heat. Sometimes this type of weather makes me glad I am not a plant that is forced to grow in all types of weather!

We have been putting out the Farm and Garden Newsletter for seven years, and it is time for a change! Don't worry, you will still get our monthly collection of interesting and informative articles—but starting next month it will come to you in the form of a blog. Blogs are great as they read much more naturally from article to article (no more “continued on page 5” and afford us the ability to have more pictures for you to learn from. I hope you find the blog easier to read and get much enjoyment out of it.

PLANT SALE this weekend! The Master Gardeners of Tioga County will be at Farmer Brown's Marketplace this weekend selling their wonderful perennials! Come and find a great plant at a great price! To see what we will be selling, and for more information about location and hours, check out the Events page of the CCE Tioga website: <http://tioga.cce.cornell.edu/events/2021/06/05/master-gardener-plant-sale-2021>. Come by and shop—and share your gardening stories and queries with us!

Finally, show your support of our local farmers by shopping at farmers' markets, buying direct from a farm store, a Community Supported Agriculture subscription, or having fun at a Pick Your Own farm. We have learned that our food supply chain is not always as robust as we would like it, so let's all aim to spend a bit more money locally—our farmers work hard all year long to bring you the best that the Southern Tier has to offer.

## Inside this issue:

- Growing peppers
- Pollen that protects bees from pesticides
- Soil compaction in the pasture
- Yet another invasive insect arrives
- And more!

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

Liz Alexander, CCE Chemung Agriculture Educator, [ema228@cornell.edu](mailto:ema228@cornell.edu)

Jingjing Yin, CCE Chemung Horticulture Educator, [jy578@cornell.edu](mailto:jy578@cornell.edu)

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



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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).



By [Steve Reiners](#), Professor and Chair, Horticulture Section, School of Integrative Plant Science, Cornell University, Cornell AgriTech.

[Read more articles from 2021](#) | [Read articles from 2020](#) | [Visit Cornell's Garden-Based Learning website](#)

June 2, 2021

Do you have a problem growing peppers? Maybe great success one summer and frustration the next? It's a complaint I often hear from gardeners. And since we're getting to pepper planting time, let's review pepper protocols.

First, let's start with pepper varieties. There are many different types of peppers to choose from. Lots of colors and shapes. Perhaps of greatest interest, the level of heat or spiciness in the fruit. The heat comes from capsaicin, a compound found within the fruit of some peppers. We have a rating system for pepper heat, using "Scoville Heat Units," named after a Connecticut pharmacist, Wilbur Scoville, who developed the scale in 1912.

The Scoville Heat Units are based on the level of capsaicin in the pepper. A sweet bell pepper has 0 units. The hottest pepper on the scale is the Carolina Reaper, coming in at more than 1.5 million units. The table below provides a listing of pepper heat.

#### Scoville Heat Units for commonly grown peppers

Pepper Type	Scoville Heat Units
Bell	0
Pimento	100-500
Anaheim	500-1,500
Poblano	1,000-2,000
Jalapeno	3,000-8,000
Serrano	10,000-25,000
Cayenne	30,000-50,000
Thai Chiles	50,000-100,000
Scotch Bonnet	100,000-325,000
Habanero	150,000- 350,000
Ghost Chiles	850,000-1,000,000
Carolina Reaper	1,400,00-2,200,000

Looking at this chart gives you an idea of the type of peppers

you may want to grow. But it also gives me a chance to correct a common misconception. If you plant a sweet bell pepper next to a habanero, you will not get hot bell peppers. What you could get are seeds within the bell pepper that have the genetics that could produce hot bells if you saved the seed to replant. The cross, and the heat, will not be seen in the fruit this year.

Scientists think peppers evolved to produce capsaicin to keep animals from eating the fruit. In fact, capsaicin is often used in animal repellants. Interestingly, birds are not bothered by capsaicin and can eat the fruit without any ill effects. This ensures that the seed will be spread as far as the birds will fly.

Capsaicin is found only in the fruit and not in stems or leaves. Within the fruit, the capsaicin is higher near the seeds, and the seeds tend to be near the stem end of the fruit. You can impress your friends by biting the blossom end where the heat is less. But have some milk or bread handy to minimize the burn.

Peppers of course are a warm-season crop. They cannot be planted outside until after the last frost and the soil has warmed up. Memorial Day is usually a good time to plant here in Ithaca.

If purchasing your peppers from a greenhouse or garden center, you won't have nearly as many choices as what you will have with tomatoes. Your decision will likely be based on

keep pepper plants upright, a little support can help. A plant with a full load can easily topple over or have branches break

from the weight. I usually only have a few peppers in my garden, so I place a one to two foot stake next to each plant when young. I don't tie it to the stake. The plant leans on the stake and just that little bit of support keeps the plants upright.

If growing a row of peppers, you can try what commercial growers do. Take that stake and place one every eight feet. While the plants are still young, run a single line of string from stake to stake. The plants will then be supported by the string.

Finally, take care when harvesting the fruit. Unlike tomatoes that usually pull off the vine easily, pepper fruit are well attached. Simply grabbing a fruit and pulling it off often breaks off entire branches. That's bad for a couple of reasons. Often small, immature peppers come off with it. In addition, if branches are suddenly removed, young fruit they were shading will suddenly



be exposed to the sun. That can lead to sun scald and loss of fruit.

The best way to harvest peppers is with a pruning shear or scissors. Cut the fruit's stem carefully and remove the fruit.

### In the garden this week

Beginner gardeners are often confused as to whether they should remove flowers from tomatoes, peppers and eggplants when setting their transplants in their beds. If the plant has flowers, leave them alone. If the plant has small fruit, those can be removed. Developing fruit require lots of the plant's resources. For the first few weeks, you want the plant to grow strong stems and lots of leaves that will photosynthesize and support lots of fruit. Fruit on a small plant won't allow that to happen. Yes, you will get some small, early fruit but at the expense of a big harvest later. Flowers don't cause the same resource drain as fruit.



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# Plant Sale 2021

## Master Gardener Plant Sale

### This is a TWO DAY SALE!

This year, the Master Gardeners purchased plant plugs from North Creek native plant nursery and Farmer Brown's Marketplace grew the small plants into lovely perennials. Many of the plants are native plants which means they will be beautiful and appreciated by both you and the birds and butterflies. Got deer? Many of these plants are deer-resistant. \$8 for a one-gallon-sized perennial. A great price!

Check out the photos on our website to get a sneak preview of the plants we will be selling. Photos by North Creek Nurseries, the source of our flower plugs.

There is more! Buy from the Master Gardeners and chop at Farmer Brown's Marketplace, and they will donate a percentage of any additional purchases to the Master Gardeners! We all win!

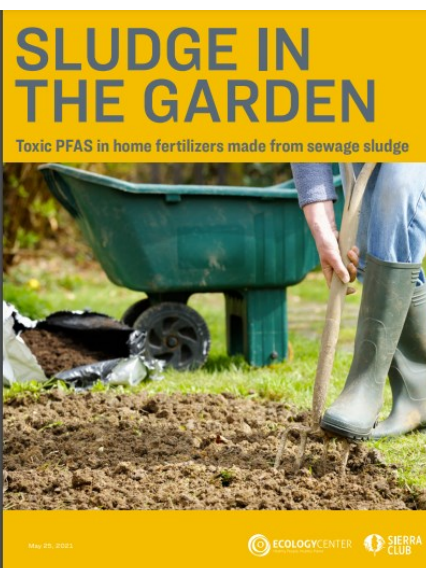
**June 5 & 6 from 10am - 4pm**  
**At Farmer Brown's Marketplace**  
4280 Route 434, Apalachin NY

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## Neonicotinoid insecticides in New York State: economic benefits and risk to pollinators

In August 2018, with funding provided through the NYS Environmental Protection Fund to research potential adverse impacts of pesticides, such as neonicotinoids, Cornell began developing a risk-benefit analysis of neonicotinoid insecticide usage in New York State with the following three goals: 1) Estimate the pest control and plant protection benefits of neonicotinoid insecticides under current usage in New York, 2) Estimate the risk from neonicotinoids to pollinators, and 3) Evaluate the relative benefits and risks of likely neonicotinoid substitutes (i.e., other insecticides or

pest control strategies) compared to neonicotinoids. This 432-page report summarizes the research undertaken to address those goals. You can find a [4-page summary to the report here](#).



## PFAS found in compost or commercial soil amendments made with sewage sludge

Many home gardeners buy compost or commercial soil amendments to enhance soil nutrition. But new tests reveal concerning levels of toxic chemicals known as PFAS in fertilizer products which are commonly made from sewage sludge. These “forever chemicals” were found in all of the nine products tested by the Ecology Center of Michigan and Sierra Club and marketed as “eco” or “natural” and eight of the nine exceeded screening levels set by the State of Maine. PFAS in fertilizers could cause garden crops to be a source of exposure for home gardeners.

This is the link to the report:

[https://www.eenews.net/assets/2021/05/24/document\\_gw\\_02.pdf](https://www.eenews.net/assets/2021/05/24/document_gw_02.pdf)

## Take part in Spotted Lanternfly citizen science

New York State is seeking volunteers like you to look for SLF and tree-of-heaven. You can help protect New York's agriculture and forests by knowing what to look for and how to report these species to New York's official invasive species database, NY iMapInvasives.

The link for more information is: <https://www.nyimainvasives.org/training#spottedlanternfly>

The photo on the right shows an adult and immature of spotted lanternfly. Photo from the University of Rhode Island.



## Pollen-sized technology protects bees from deadly insecticides

By Krishna Ramanujan, *Cornell Chronicle*

Cornell-developed technology provides beekeepers, consumers and farmers with an antidote for deadly pesticides, which kill wild bees and cause beekeepers to lose around a third of their hives every year on average.

An early version of the technology — which detoxified a widely-used group of insecticides called organophosphates — is described in a new study, “[Pollen-Inspired Enzymatic Microparticles to Reduce Organophosphate Toxicity in Managed Pollinators](#),” published May 20 in *Nature Food*. The antidote delivery method has now been adapted to effectively protect bees from all insecticides, and has inspired a new company, [Beemunity](#), based in New York state. Studies show that wax and pollen in 98% of hives in the U.S. are contaminated with an average of six pesticides, which also lower a bee’s immunity to devastating varroa mites and pathogens. At the same time, pollinators provide vital services by helping to fertilize crops that lead to production of a third of the food we consume, according to the paper.



Abraham McCauley/Provided

*Beemunity sugar bars that contain microsponges, for use with a bee feeder that is under development.*

Beemunity sugar bars that contain microsponges, for use with a bee feeder that is under development.

“We have a solution whereby beekeepers can feed their bees our microparticle products in pollen patties or in a sugar syrup, and it allows them to detoxify the hive of any pesticides that they might find,” said James Webb, M.S. ‘20, a co-author of the paper and CEO of Beemunity.

First author Jing Chen is a postdoctoral researcher in the lab of senior author [Minglin Ma](#), associate professor in the Department of Biological and Environmental Engineering in the College of Agriculture and Life Sciences (CALS). [Scott McArt](#), assistant professor of entomology in CALS, is also a co-author.

The paper focuses on organophosphate-based insecticides, which account for about a third of the insecticides on the mar-

ket. A recent worldwide meta-analysis of in-hive pesticide residue studies found that, under current use patterns, five insecticides posed substantial risks to bees, two of which were organophosphates, McArt said.

The researchers developed a uniform pollen-sized microparticle filled with enzymes that detoxify organophosphate insecticides before they are absorbed and harm the bee. The particle’s protective casing allows the enzymes to move past the bee’s crop (stomach), which is acidic and breaks down enzymes.

Microparticles can be mixed with pollen patties or sugar water, and once ingested, the safe-guarded enzymes pass through the acidic crop to the midgut, where digestion occurs and where toxins and nutrients are absorbed. There, the enzymes can act to break down and detoxify the organophosphates.

After a series of in vitro experiments, the researchers tested the system on live bees in the lab. They fed a pod of bees malathion, an organophosphate pesticide, in contaminated pollen and also fed them the microparticles with enzyme. A control group was simultaneously fed the toxic pollen, without the enzyme-filled microparticles.

Bees that were fed the microparticles with a high dose of the enzyme had a 100% survival rate after exposure to malathion. Meanwhile, unprotected control bees died in a matter of days.

Beemunity takes the concept a step further, where instead of filling the microparticles with enzymes that break down an insecticide, the particles have a shell made with insect proteins and are filled with a special absorptive oil, creating a kind of micro-sponge. Many insecticides, including widely-used neonicotinoids, are designed to target insect proteins, so the microparticle shell draws in the insecticide where it is sequestered inert within the casing. Eventually, the bees simply defecate the sequestered toxin.

The company is running colony-scale trials this summer on 240 hives in New Jersey and plans to publicly launch its products starting in February 2022. Products include microparticle sponges in a dry sugar medium that can be added to pollen patties or sugar water, and consumer bee feeders in development.

“This is a low-cost, scalable solution which we hope will be a first step to address the insecticide toxicity issue and contribute to the protection of managed pollinators,” Ma said.

*Jin-Kim Montclare, a researcher at New York University’s Tandon School of Engineering, is a co-author.*

*The technology is licensed through Cornell’s [Center for Technology Licensing](#) (CTL). Ma and McArt are advisors for Beemunity.*

*The study was funded by the U.S. Department of Agriculture’s National Institute of Food and Agriculture, the National Institutes of Health and the National Science Foundation.*

## Pasture Soil Compaction—Slow, but stealthy thief of pasture productivity

By Fay Benson, Cornell Cooperative Extension

I had a pasture soil compaction epiphany while working in a St. Lawrence County pasture on a NE SARE-supported project. The project was to plant radishes and other brassicas into established pasture swards. The goal was to try methods of establishment of late-season forages which would increase the palatability and nutrient density of fall pastures. The project had only minimal success because even though I burned back the pasture sward with acetic acid, it eventually grew back and smothered the young brassicas. While standing in the pasture, I looked under the fence line (see photo 1) and could see the soil under the fence was a good six inches higher than the pasture soil. Under closer inspection, the plants under the fence were a healthier mix of cool-season grasses, while out in the pasture there were clumps of sedge grasses, which is an indication of low oxygen in the soil due to compaction. The other interesting piece of information was that I was in the pasture with the farmer who had managed it for the past 15 years and he had not noticed the difference in soil heights. I believe that this was because compaction happens very slowly over the years and goes unnoticed. Once I became aware of this phenomenon, I began to see it in more and more pastures that I visited. But how big of a problem was it?

It made sense to me that pastures would have some compaction, after all, animals that graze these pastures are out every day in the grazing season, even in times of heavy rainfall which is when soil is most prone to hoof compaction. When putting together a proposal to NE SARE to investigate

*To observe the health of any soil, including pasture soil, is an evolving field of knowledge. Graziers can add to this knowledge by observing and bringing their observations to extension and research personnel. After all, as Paul Harvey said, “Despite all our accomplishments, we owe our existence to a six-inch layer of topsoil and the fact it rains.” (photo provided*



pasture compaction, I found studies that showed a medium-sized cow could have more compaction per square inch than a medium-sized tractor. To get an idea of what happens to soil when compacted, see diagram 1 showing the pie charts comparing compacted soil vs uncompacted soil. In the uncompacted soil, the area in a defined volume of soil is evenly divided between pore space and the minerals that make up the soil. In compacted soil, the pore space is reduced by about half so that there is a higher percentage of minerals in the same space. This loss of pore space has far-reaching effects on the soil to be productive.

### Loss of Pore Space Reduces Pasture Productivity

Air space is the most affected by compaction. Its loss affects three components of productivity:

1. The beneficial biology in soil is aerobic, therefore it needs oxygen to breathe, as well as space to exhale carbon dioxide. The biology is responsible for breaking down organic matter and converting it to microbial metabolites which enter roots to feed pasture plants.
2. Lack of air space in soil limits deep-rooted pasture plants and encourages plants, such as sedge grasses, which survive in soil with low levels of oxygen by using an air tube. This is part of its anatomy that brings air from above ground to its roots below ground. I saw this firsthand at the pasture in St. Lawrence County, as well as others.
3. Limiting the environment for biology to do its work, reduces the strength of soil aggregates, which speeds up compaction. The reduction of pore space for water in the soil also has negative impacts on productivity:

1. Reduction of the water holding capacity of the soil will decrease sward growth in times of drought.
2. If there is less water in soil aggregates in the spring, the compaction relieving action of “frost heaving” will be reduced since there is less ice to expand in the aggregates.
3. Water infiltration will be reduced to lower portions of the soil since pathways will be impeded to handle rainfall. This, in turn, causes ponding on the surface which only exacerbates the issue of compaction. If the pasture is located on a hillside, the ponding turns into the runoff of nutrients.
4. Pathways for water infiltration is also impacted by “Platy” structures forming in the upper layers of soil. (see photo 2) The plates are formed by hoof compaction in upper levels of the soil. The plates can be seen by digging a shallow test pit and looking for horizontal lines in the soil which can be separated easily by a knife or by hand. In severely impacted soil, roots can be seen growing horizontally, rather than vertically, along the plates. The forming of plates in pasture soil impacts roots to lower levels as well as water infiltration.

**Other outcomes of the NE SARE study of pasture soil compaction**

A fact sheet prepared by myself, Nancy Glazier, and Abbie Teeter was accepted by NE SARE to help farmers, not only identify, but remediate pasture soil compaction. It can be found at: <https://cdn.sare.org/wp-content/uploads/20210126132426/Compaction-Fact-Sheet-Final-1.pdf>

In our work, we are researching a method for comparing penetrometer readings from one year to the next. This would allow a farmer or researcher to measure any changes in pasture soil compaction due to changes in management from one year to the next. A single reading of soil resistance with a penetrometer will vary from one day to the next due to soil moisture changes. Our hypothesis is that by taking two readings in the pasture, one from the optimum compaction area under the fence line and one from an im-

acted area in the pasture, the ratio of the two will remain constant since whatever variable impacts one area will have the same impact on the other area. We are calling the comparison of these two sites the Pasture Compaction Ratio (PCR). The ratio of the two areas will hopefully capture any changes in the pasture compaction since the fence line reading will always be optimum the only changes will be due to changes in the pasture soil resistance. More information about the PCR can be found here: [https://projects.sare.org/sare\\_project/1ne19-372/](https://projects.sare.org/sare_project/1ne19-372/). Our work will continue into 2021, when we will have three years of data collected on the PCR.

Compaction in pastures is difficult to avoid because of the need to have animals on them in all types of weather. Basic management tools to reduce and prevent compaction are:

1. Keep your soil organic matter high, because it is related to aggregate strength which allows soil to be much more resilient when it comes to compaction. This can be done by grazing more mature grasses and following the “graze half and leave half” rule. This puts the carbon back into the soil.
  2. In times of heavy rain try to stay off pasture soil that is prone to compaction, such as silty soils or fields prone to flooding.
  3. Switch from grazing to haying on paddocks that allow it. Haying a paddock allows deeper roots to increase the oxygenated zones of your soil.
- Watching the health of animals on pasture is enjoyable and easy to do, observing the health of pasture plants or the sward of a pasture requires a closer look and some specific knowledge about plant identification. To observe the health of any soil, including pasture soil, is an evolving field of knowledge. Graziers can add to this knowledge by observing and bringing their observations to extension and research personnel. After all, as Paul Harvey said, “Despite all our accomplishments, we owe our existence to a six-inch layer of topsoil and the fact it rains.”



## USDA Confirms Presence of Box Tree Moth in the US

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) has confirmed the presence of box tree moth, *Cydalima perspectalis*, in the continental United States and is taking action alongside state partners and industry to contain and eradicate the invasive pest that was imported on nursery plants shipped from Ontario, Canada.

The box tree moth can significantly damage and potentially kill boxwood plants if left unchecked. Between August 2020 and April 2021, a nursery in St. Catharines, Ontario shipped boxwood (*Buxus* species) that may have been infested with box tree moth to locations in six states—25 retail facilities in Connecticut, Massachusetts, Michigan, New York, Ohio, and South Carolina—and a distribution center in Tennessee. At this time, the pest has been identified in three facilities in Michigan, one in Connecticut, and one in South Carolina, and APHIS is working with state plant regulatory officials to determine whether other facilities may be impacted.

On May 26, 2021, APHIS issued a Federal Order to halt the importation of host plants from Canada, including boxwood (*Buxus* species), *Euonymus* (*Euonymus* species), and holly (*Ilex* species). In addition, APHIS is coordinating closely with the affected States to:

- Find and destroy the imported plants in the receiving facilities
  - Trace imported plants that were sold to determine additional locations of potentially infected boxwood
  - Provide box tree moth traps and lures for surveys in the receiving facilities and other locations that received potentially infected boxwood
  - Prepare outreach materials for State agriculture departments, industry, U.S. Customs and Border Protection Agriculture Specialists stationed along the Canadian border, and the public.
- These immediate measures are focused on protecting the economic viability of the thriving U.S. boxwood industry as well as nurseries and other establishments that sell these plants wholesale and direct to consumers.

The box tree moth is native to East Asia and has become a serious invasive pest in Europe, where it continues to spread. In 2018, it was found in the Toronto area of Canada. The caterpillars feed mostly on boxwood and heavy infestations can defoliate host plants. Once the leaves are gone, larvae consume the bark, leading to girdling and



*The box tree moth can significantly damage and potentially kill boxwood plants if left unchecked. (Photo courtesy of Matteo Maspero and Andrea Tantardini, Centro MiRT - Fondazione Minoprio [IT])*

plant death.

Members of the public can prevent the box tree moth from spreading. Please allow State or Federal agricultural officials to inspect your boxwood trees and place an insect trap



*Caterpillars and webbing (larvae can reach 1.5 inches long) (Courtesy of Matteo Maspero and Andrea Tantardini, Centro MiRT - Fondazione Minoprio [IT].)*

if they visit your home. If you bought a boxwood plant within the last few months, please inspect it for signs of the box tree moth and report any findings to your local USDA office or State agriculture department.



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

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## Workshops to Attend

### Strategies for Gardening with Deer

Tuesday, June 15, 2021, 6:00 PM - 8:00 PM

Deer can be a major challenge for gardeners in this area, munching on some of our favorite ornamentals and veggies. This class will teach you some strategies for how co-exist with deer while still having a beautiful and productive garden. We will discuss deterrents and will feature flowers, shrubs, and trees that are deer-resistant to inspire you.

Taught by Mila Fournier with help by Master Gardener Volunteers.

ALL CLASSES ARE RECORDED AND PARTICIPANTS WILL RECEIVE A RECORDING 24-48 HOURS FOLLOWING THE CLASS.

#### Fee

\$0-\$30 /person self-determined sliding scale

#### Register

<https://ccetompkins.mahaplatform.com/events/7viff8jyrk>

### Gardening for Beneficial Insects: Bees, Butterflies, and Natural Enemies

Tuesday, June 22, 2021, 6:00 PM - 8:00 PM

Beneficial insects are so much more than bees! In this class you'll learn how to recognize some common natural enemies of pests and what you can do to make your garden more attractive to them. We'll especially focus on how to choose plants that provide food and shelter for these beneficial insects and how to establish them in your garden.

Amara Dunn is the Biocontrol Specialist with the New York State Integrated Pest Management Program (a statewide team with Cornell Cooperative Extension). She helps all New Yorkers use biological control more effectively whether on their farms or around their homes, businesses, schools, etc.

#### Fee

\$0-\$30/person self-determined sliding scale; pay what you can afford

#### Register

<https://ccetompkins.mahaplatform.com/events/24cfj9hm74>



Want to buy more local food this year? Bookmark <https://buylocalfoodny.org/>—it is your online source for local food in Tioga and Chemung counties.

Support local farmers and enjoy wonderful local food—a win-win situation!



### *Helping You Put Knowledge To Work*

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## Agriculture History in Tioga County

Time goes by quickly—how many of these past Dairy Princesses do you know?

### Tioga County Dairy Princesses

- 1964 Jeanne Bakeman Jackson, Candor, NY, daughter of Mr.&Mrs. Lloyd Bakeman, Candor
- 1965 Betty Lou Faber Dodge, Spencer, NY, daughter of Mr.&Mrs. Edwin Faber, South Owego
- 1966 Trish Pringle Britton, Washington, DC, daughter of Mr.&Mrs. George Pringle, Mayville
- 1967 Virginia Tull Sheppard, Newark Valley, NY, daughter of Mr.&Mrs. Clyde Tull, Newark Valley
- 1968 Arlene Martin Freeman, Kennwick, WA, daughter of Mr.&Mrs. Graydon Martin, Nichols
- 1969 Karen Herzog, Ithaca, NY, daughter of Mr.&Mrs. Ed Herzog, Candor
- 1970 Ruth Robinson Toal, Owego, NY, daughter of Mr.&Mrs. Riker Robinson, Owego
- 1971 Laurie Albro Menapace, Falls, PA, daughter of Mr.&Mrs. Clifford Albro, Nichols
- 1972 Mary Ann Pipher Blasch, Nichols, NY, daughter of Mr.&Mrs. Kenneth Pipher, Tioga Center
- 1973 Janet Donnelly Schuster, Owego, NY, daughter of Mr.&Mrs. Nathan Donnelly, Nichols
- 1974 Nina Hill Smith, Owego, NY, daughter of Mr.&Mrs. Donald Hill, Apalachin
- 1975 Lorri Brink Russo, South Lyon, MI, daughter of Mr.&Mrs. Carl Brink, Berkshire
- 1976 Beth Tubbs Blakemann, Lockwood, NY, daughter of Mr.&Mrs. Carlton Tubbs, Lockwood
- 1977 Nancy Pipher Mullen, Waverly, NY, daughter of Mr.&Mrs. Harry Pipher, Waverly
- 1978 Trudy Bailey Lainhart, Vestal, NY, daughter of Mr.&Mrs. Lynn Bailey, Nichols
- 1979 Cyathia Tubbs Overvold, Crown Point, IN, daughter of Mr.&Mrs. Carlton Tubbs, Lockwood
- 1980 Carolyn Klett Brink, Barton, NY, daughter of Mr.&Mrs. Carl Klett, South Owego
- 1981 Tammy Zorn Moyer, Barton, NY, daughter of Mr.&Mrs. Irving Zorn, Barton
- 1982 Betsy Donnelly Hale, Montrose, CO, daughter of Mr.&Mrs. James Donnelly, Nichols
- 1983 Lorri Strong Dandignac, Delhi, NY, daughter of Mr.&Mrs. Robert Strong, Barton
- 1984 Carolyn Noteboom Mortone, Erin, NY, daughter of Mr.&Mrs. David Noteboom, Spencer
- 1985 Theresa Rathke Cochran, Freehold, NY, daughter of Mr.&Mrs. Herman Rathke, Owego
- 1986 Michele Tubbs Strong, Barton, NY, daughter of Mr.&Mrs. Richard Tubbs, Candor
- 1987 LuAnn Jantz, Herkimer, NY, daughter of Mr.&Mrs. Roger Jantz, Candor
- 1988 Jill Aman, Candor, NY, daughter of Mr.&Mrs. Robert Aman, Candor
- 1989 Bernadette Noteboom Raupers, Elmira Heights, NY, daughter of Mr.&Mrs. David Noteboom, Spencer
- 1990 Susan Rowland, Owego, NY, daughter of Mr.&Mrs. John Rowland, Owego
- 1991 Robin Howland Gillette, Spencer, NY, daughter of Mr.&Mrs. Robert Howland, Candor
- 1992 Kristy Martin Robertson, Wyoming, NY, daughter of Mr.&Mrs. John Martin, Owego
- 1993 Lillian Lunde Henry, Willseyville, NY, daughter of Ingrid Lunde, Apalachin, and the late Lars Lunde
- 1994 Holly Howland, Candor, NY, daughter of Mr.&Mrs. Robert Howland, Candor
- 1995 Molly Zorn, Owego, NY, daughter of Mr.&Mrs. Owen (Tom) Zorn, Owego
- 1996 Rose Howland, Candor, NY, daughter of Mr.&Mrs. Robert Howland, Candor
- 1997 Stacy Brink, Berkshire, NY, daughter of David & Penny Brink, Berkshire
- 1998 Dawn Babcock, Barton, NY, daughter of Mr.&Mrs. Carl Higley, Barton and Mr.&Mrs. Robert Babcock, Rome, Pa.
- 1999 Nicole Higley, Florida, daughter of Mr.&Mrs. Carl Higley, Barton and Susan Sammartino, Florida
- 2000 Heather Howland, Candor, NY, daughter of Mr.&Mrs. Robert Howland, Candor