



December 2015



By Barb Neal, CCE Tioga

### Homesteading Series Planned

As I write this article, I am surrounded by majestic saguaro cacti in the foothills of the Catalina Mountains. The cacti are the icon of the Sonoran desert—and I am truly enjoying seeing their diversity of form and how tenaciously they grow in the desert soil. It is my first trip to the Southwest, and I have learned as much as possible about the desert landscape, as it is so different than ours.

And, yes, the sunshine and blue skies are wonderful, but I prefer our Southern Tier landscape of tall trees, clear flowing streams, and fertile fields. We definitely grit our teeth and wait out winter, but we are rewarded each year with wonderful growing conditions that give us an annual bounty of food. We rarely have to worry about sufficient rainfall, something I believe will continue to foster the renaissance of local vegetables, meat, and other products that grace our dinners and enrich our lives.

It is with that in mind that I would like to tell you about a series of workshops that I plan to offer at CCE Tioga in the next few months—a **homesteading series**. I will be putting together a fine line up of presenters who know much about raising livestock—from beefers to goats to sheep and more. I hope to have presentations on keeping bees, constructing a root cellar, preserving food and other homestead topics. Whether you come to learn how you can augment your income by raising some livestock, or filling your own freezer and pantry with healthy food, I think you will enjoy the workshops and find them very helpful. So look for a schedule of workshops in next month's Farm & Garden!

We will also be trying something new in next month's issue—we will be trialing Constant Contact as the means to send the newsletter out. We have been plagued by too many email bounce-backs using our current method and hope that the new system will get your newsletter to you more easily. The format of the newsletter won't change, only the email that brings the newsletter to you.

My very best wishes to you and your family as you celebrate the holidays!



Photo: Wikimedia

### Inside this issue:

- Handling Pesticides in the Winter
- Emerald Ash Borer Update
- Cornell Herbarium
- Salt Damage on Turf
- Bacterial Disease of Tomatoes
- NY Forest Report
- Upcoming Workshops
- ...and more

### Tax Tips for Forest Owners

Do you have a managed forest and need some information about how to report the income/costs for your 2015 taxes? Call CCE Tioga at 607-687-4020 and we will send you a US Forest Service bulletin that explains tax reporting.

## Workshops and Events Offered by CCE of Tioga County

**December 7th, 6:00 to 8:30 pm Cornell Cooperative Extension of Tioga County Annual Meeting and Dinner.**  
See more information about this event on the bottom of the next page. Owego Treadway Inn.

**December 9th, 6 to 7:30 pm. Our Favorite Tools and Tool Sharpening Workshop.** CCE Tioga.

Do you have a favorite tool that you could not garden without? A pair of pruners that fits perfectly in your hand, or a rake that just motors through the leaves? A garden kneeler that lets you garden despite creaky knees or a bum hip? Bring it to our adult gardeners "Show and Tell". If you remember where you got the tool, even better--as the holidays are nearing and you might bring something that other gardeners might love to put on their Santa list. If your tool is too large to bring in, simply take a picture of it and bring that in to share with us.

After the Show and Tell, we will have a workshop on sharpening pruning tools, so bring a pair of pruners or loppers in to practice on. We will talk about putting your tools away for the winter so they will be ready for use as soon as the spring returns!

There is no fee for this workshop. Please register by calling Barb at 607-687-4020.



### Southern Tier Maple School

Saturday, December 5th. 9:00 a.m. – 11:30 a.m. at the Tyrone Fire Hall; State Route 226; Tyrone, NY. Featuring Cornell Cooperative Extension's State Maple Specialist, Steve Childs, this annual refresher will help maple producers of all levels improve the productivity, efficiency and profitability of their operations. This year's topics include: recommendations for tubing system management; reverse osmosis technology for smaller operations; understory vegetation management in the sugarbush, and an overview of NY's new maple syrup grades. Attendees are welcome to bring their own syrup samples for grading. The workshop will conclude with a demonstration of how to make granulated maple sugar. Light refreshments provided. This event is free and open to the public. For general information on maple syrup production, please visit: [www.cornellmaple.com](http://www.cornellmaple.com) For additional questions, contact Brett Chedzoy of Schuyler CCE: [bjc226@cornell.edu](mailto:bjc226@cornell.edu) (ph: 607-535-7161)

**Maple Confection Workshop I**, December 20, Steuben County, Contact: Stephanie Mehlenbacher, Cornell Cooperative Extension of Steuben County, 3 Pulteney Square Feast, Bath, NY 14810, 607- 583-3240  
[sms64@cornell.edu](mailto:sms64@cornell.edu)

## Fall Master Gardener Regional Training Planned

By Barb Neal, CCE Tioga

The Master Gardener Volunteer Program coordinators from Broome, Tompkins and Tioga Counties have been meeting with our state Master Gardener coordinator from Cornell to develop a regional training program that will begin in late summer or early fall of 2016. Anyone who is from those counties, as well as Chemung County, is welcome and encouraged to participate. The planning for the training is still at the beginning stage, but it looks like it will be similar to the Master Gardener Volunteer Training program I developed for Tioga County this year. That training had participants do some guided home study, and coupled it with hands-on, experiential group workshops.



The Master Gardener Volunteer Program is a nationwide program that appeals to folks who want to learn more about gardening in all its facets: ornamental, vegetable gardening, fruit growing, turf care, and more. The course takes about 50 hours to complete, and then you are expected to give back at least that many hours in the following two years. Each program is run slightly differently in our counties, so check with your local CCE Horticulture Educator for exact requirements. All programs feature community service and education as the keystones of the volunteer service. It is a great way to learn about what you love, meet new friends, and improve your community.

If you are a Master Gardener already—great! You may want to refresh your training by attending this program. If you know anyone who might be a great fit for Master Gardeners, please let them know about the upcoming training so they are ready to come on board, we would love to have them. The regional training happens only once every 3-4 years, so now is the time to get ready!

---

## 2015 CCE Tioga Annual Meeting and Dinner

Monday, December 7, 2015, 6:00 PM - 8:30 PM

### **You Are Invited To Attend!**

Cornell Cooperative Extension of Tioga County's Annual Meeting and Friends of Extension Dinner will be held on *Monday, December 7<sup>th</sup>, 2015 at the Owego Treadway Inn from 6:00 to 8:30 pm.*

The evening will include a buffet dinner, a review of program highlights from the year, and election of new Board members. In addition, the association will give out Board and staff appreciation awards, as well as several Friends of Extension Awards. These awards will be given to community members who have demonstrated dedication and on-going commitment to support CCE Tioga and its mission to help improve the quality of life for citizens of Tioga County.

### **Please join us in recognizing:**

**4-H Youth Development – John King**

**Campus Collaborator – Dr. Russ Hahn**

**Family Development – Linda Bisson**

**Friend of CCE Tioga – Karen Lindhorst**

**Agriculture and Horticulture – Teresa Bishop**

**Spirit of Extension – Tioga Downs**

**Community Development and Public Issues – Janice Barto**

**Board and Staff members**

**Posthumously Recognized Campus Collaborator – Cathy Heidenreich**

Please RSVP ASAP by calling 687-4020; Send a check with your name(s) or send an e-mail to Tina Murphy at [t1m8@cornell.edu](mailto:t1m8@cornell.edu)

## Cold Weather Storage and Handling of Liquid Pesticides

*From University of Wyoming Cooperative Extension Service Bulletin*

As winter's cold approaches, it is important to take a look at your pesticide cabinet and determine if the products can tolerate the cold temperatures--some pesticides can and some cannot. Pesticides cost a lot of money--check out this bulletin from the University of Wyoming. The entire bulletin, which includes a listing of different chemicals and their freeze tolerance at: <http://www.wyomingextension.org/agpubs/pubs/MP93-5.pdf>

This guide explains procedures for proper winter storage and handling of leftover liquid pesticides. Freezing of liquid pesticides can result in separation of the active ingredient from the solvents or emulsifiers or inactivation of emulsifiers, which may lead to crystallization or coagulation of the pesticide. Applicators should know which pesticides can be frozen and which cannot. Techniques for thawing and redissolving are also important since a pesticide, once frozen, can plug spray equipment, result in poor product performance, and/or damage crops if the proper thawing and mixing procedures are not followed.

Many pesticides can freeze with no adverse effects to the pesticide, although separation of the active ingredient and solvent will occur. Certain steps must be followed before using a pesticide that has been frozen. First, the product must be thawed. Before attempting to thaw a frozen pesticide, however, the container should be checked to make sure it is not ruptured or cracked from the expansion of the frozen liquid. If sound, the container should be brought to room temperature (placed in a heated room or the south side of a sunny building away from children, livestock, and pets) for the thawing process, which may take several days. Once the liquid has thawed, the container can be rolled, shaken, or otherwise agitated to get the contents into a uniform suspension. The container should also be inverted several times to ensure the product is completely dissolved. Pesticide manufacturers caution that if a pesticide cannot be totally redissolved (crystals are still present), the pesticide should not be used.

**Storage Conditions** The freezing point of many pesticides is lower than 32 degrees Fahrenheit due to the hydrocarbon solvents or inert ingredients. Pesticides that cannot be frozen should be placed in a heated or adequately insulated area to avoid low temperatures. Wettable powders and granules, as a rule, are not affected by low temperatures. These formulations should be stored in a dry place as moisture may promote caking or lead to certain chemical changes reducing their effectiveness. Products formulated

in water soluble bags require special winter storage. These bags have a high affinity for moisture and become brittle when frozen. They will break open if handled when brittle. It is important that they be stored in heated facilities. Before storing pesticides for the winter, the applicator needs to read the pesticide label.

## New Farmers Grant Fund Supporting Agribusiness Across New York State

### Highlights

**New York State announced \$1 million for the 2nd round of the New Farmers Grant Fund.** The grants will help beginning farmers improve profitability through one or more of the following program goals:

- Expanding agricultural production, diversifying agricultural production and/or extending the agricultural season;
- Advancing innovative agricultural techniques that increase sustainable practices such as organic farming, food safety, reduction of farm waste and/or water use;
- Creating or expanding partnerships with other entities such as farms, institutions or regional food-hubs for processing, selling and/or distributing agricultural products.

Grants may provide a minimum of \$15,000 and a maximum of \$50,000 for up to 50% of total project costs. The remaining 50% must be matched by the recipient. Eligible sources of recipient match are limited to cash, lines of credit and loans.

### Eligibility

Eligible Farmers/Farms (*all of the following criteria must be met*):

- A farm operation of one hundred fifty acres or less located wholly within New York State which produces an agricultural product as defined by the Guidelines;
- The farm operation must have a minimum of \$10,000 in sales from products grown or derived from the farm as reflected in either personal or business 2014 or 2015 tax returns;
- All owners must be New York State residents of at least 18 years of age;
- All owners must be in the first ten years of having an ownership interest in any farm operation as of April 1, 2015;
- All owners must materially and substantially participate in the day-to-day production of an agricultural product grown or raised on the farm operation.

Eligible costs include the purchase of machinery and equipment, supplies, and/or construction or improvement

of physical structures used exclusively for agricultural purposes.

### Application and Guidelines

Program application and guidelines can be found at: [www.esd.ny.gov/BusinessPrograms/NewFarmersGrantFund.html](http://www.esd.ny.gov/BusinessPrograms/NewFarmersGrantFund.html)

Applications must be postmarked by January 22, 2016. Grant awards will be announced in the Spring of 2016.

**Questions?** Questions should be sent to Bonnie Devine at [nyfarmfund@esd.ny.gov](mailto:nyfarmfund@esd.ny.gov)

If you would like to apply for this grant, please contact Barb Neal, CCE Tioga, at 607-687-4020.

## Emerald Ash Borer Detected in Broome County

*By CCE Broome*

NYS Department of Environmental Conservation (NYS DEC) has released the results from the emerald ash borer (EAB) detection traps they deployed in Broome County in 2015. Emerald ash borer, a non-native forest insect pest that kills ash trees, was first detected in Broome County in 2014 on a trap in the Town of Conklin. In 2015, EAB beetles were found on traps in four locations in Broome County: Town of Conklin, Town of Vestal, Village of Johnson City, and Town of Fenton.

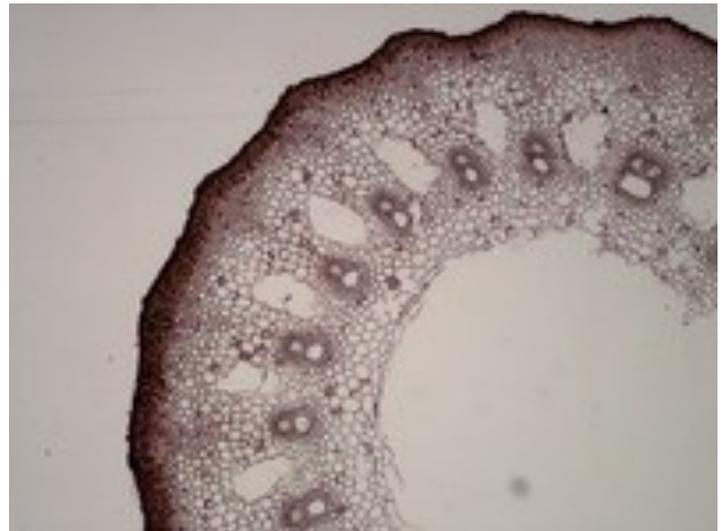
Municipalities, private landowners, and other entities that own land that contain ash trees need to monitor their ash trees for signs of infestation and develop response plans to help minimize the negative impacts caused by emerald ash borer. Ash trees comprise about ten percent of all the trees in Broome County, and in future years most of these trees will die, creating hazardous conditions as they begin rot and fall.

For information on EAB, including options for treating trees and planning guidance, visit the NYS DEC website at [www.dec.ny.gov](http://www.dec.ny.gov) and the NYS Invasive Species Clearinghouse website at <http://nyis.info/>.

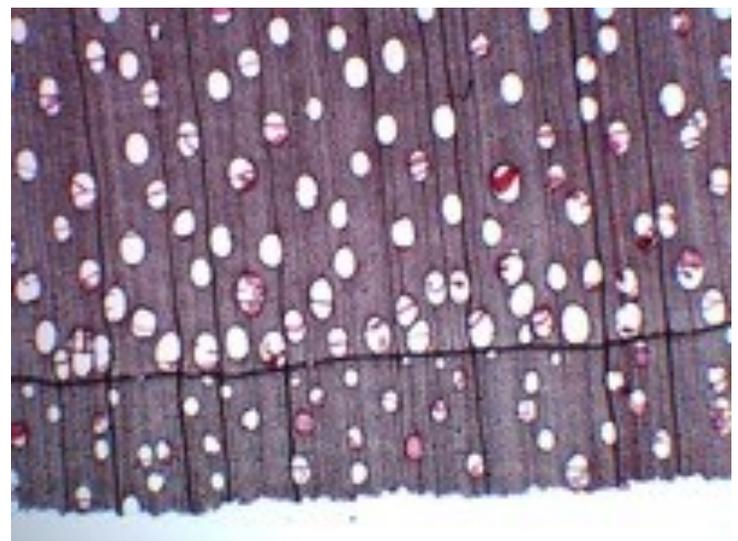
## Cornell Herbarium Online Slides

If you have access to the internet and a few minutes to explore, check out the Cornell University Plant Anatomy Collection. CUPAC (Cornell University Plant Anatomy Collection) is an historically important collection of anatomical slide preparations of a wide array of plant parts. These slides include materials prepared by renowned Cornell Plant Anatomists, both for teaching and publication.

Below are two of the many images you can see on the website <http://cupac.bh.cornell.edu/>



CUPAC slide 83, image 3--stem and root stock of Equisetum



CUPAC Slide 101, image 1--Showing the wood of a Beech tree

## Bulletin Helps Farmers use Cover Crops that Support Pollinators

Cover crops can do a lot for your farm. To learn how they can support a thriving community of pollinators and beneficial insects—which in turn can improve crop quality and yield—check out SARE’s new 16-page publication, *Cover Cropping for Pollinators and Beneficial Insects*.

Available for free as either a download or in print, *Cover Cropping for Pollinators and Beneficial Insects* helps farmers make thoughtful changes in cover crop selection and management that support pollinators along with their other goals, such as suppressing weeds, managing nitrogen and improving soil health.

Pollinators provide a critical service in food production. As honey bees continue to suffer from Colony Collapse Disorder, providing pollinators with a healthy on-farm environment is essential. In October, the USDA Natural Resources Conservation Service (NRCS) announced \$4 million in assistance for Midwestern farmers to plant bee-friendly cover crops, wildflowers and native grasses to help ensure farm productivity.

*Cover Cropping for Pollinators and Beneficial Insects* includes information on pollinator and beneficial insect ecology, including details on common cover crop species and their insect attractiveness. It also addresses the limitations of cover crops, describes relevant crop insurance regulations and gives guidance on reducing harm to beneficial insects when cover crops are used in rotation with pesticide-treated crops.

[Cover Cropping for Pollinators and Beneficial Insects](http://www.sare.org/Learning-Center/Bulletins/Cover-Cropping-for-Pollinators-and-Beneficial-Insects) can be ordered for use as a handout at conferences, workshops or field days. It was written by Xerces Society for Invertebrate Conservation staff members, with contributions from the NRCS. Click on <http://www.sare.org/Learning-Center/Bulletins/Cover-Cropping-for-Pollinators-and-Beneficial-Insects> to download this free publication.



## Sniffing Out Overwintering Stink Bugs

By [Sharon Durham](#)  
March 18, 2015

In 2013, [U.S. Department of Agriculture](#) (USDA) scientists surveyed forests in Maryland and West Virginia and found that stink bugs prefer to overwinter in large, dry, dead trees having a circumference of more than 23 inches.

Agricultural Research Service (ARS) entomologist [Tracy Leskey](#) and her team at the [Appalachian Fruit Research Station](#) in Kearneysville, West Virginia, surveyed the forests and found that oak and locust trees seem to be the favorite stink bug overwintering sites. According to Leskey, the porous dead tissue and peeling bark make a great place for the bugs to crawl into and hide. She found stink bugs in 33 percent of the trees fitting those parameters.

ARS is USDA's principal intramural scientific research agency.

The 2013 survey team included two detector dogs. The dogs were first trained to recognize the odor of adult stink bugs. Then, in indoor trials, they were guided by their handlers to find bugs hidden in cardboard boxes. Next, the dogs were trained in the field, where bugs were hidden beneath pieces of bark attached to living trees. In both indoor and outdoor trials, the dogs accurately detected target insects with greater than 84 percent accuracy.

Finally, the dogs were taken to woodland areas along the Appalachian Trail in Maryland. In these real-world conditions, the detector dogs were able to find wild overwintering stink bugs.

As part of a project known as the "Great Stink Bug Count," citizen volunteers from the Mid-Atlantic, Midwest, and Pacific Northwest regions of the United States recorded daily counts of stink bugs, along with their locations on residences and the time of each tally.

Landscape type seemed to have the greatest influence on overall stink bug numbers arriving at specific homes, according to Leskey. Homes located in mixed agriculture and woodland sites had the greatest number of stink bugs. On average, these homeowners counted over 3,000 stink bugs. Suburban and urban dwellers counted fewer stink bugs.

[Read more](#) about this research in the March 2015 issue of *Agricultural Research* magazine

## New York Forest Report Issued by USDA

The USDA issued the forest inventory analysis for the years 2008 through 2012 for New York State. The entire document is available on line at: [http://www.fs.fed.us/nrs/pubs/rb/rb\\_nrs98.pdf](http://www.fs.fed.us/nrs/pubs/rb/rb_nrs98.pdf) I found it interesting to read the items that were listed as Issues to Watch.

### Issues to Watch

- The area in sapling/seedling size stands, or early successional forest, has been declining. This results in a decline of wildlife species that require early-successional habitats.
- Fragmentation is changing how New York's forests function and is affecting forest sustainability. Fragmentation diminishes the benefits and services forests provide and makes forest management more difficult.
- Forty-seven percent of forest land is less than fully stocked with live trees but when only growing-stock trees are considered, the less than fully stocked level increases to 62 percent. The broad extent of stands that are less than fully stocked indicates that much disturbance, natural and human-caused, has occurred in New York's forests. The 3.5 million acres of timberland that are poorly stocked with growing stock trees or non-stocked represents a loss of potential growth. The increase in stands that are poorly stocked with growing-stock trees is a threat to the long-term sustainability of harvesting quality timber from New York's forests.
- The proliferation of small beech trees in the aftermath of beech bark disease (BBD) infection, also known as beech brush, can inhibit the reproduction of other species. High numbers of beech saplings in some areas are interfering with the regeneration of other species. While the number of beech saplings has increased, numbers of saplings for species associated with beech have decreased since 2007. These species include sugar maple (-13 percent), red maple (-9 percent), and white pine (-10 percent).
- Beech and ash seedlings collectively represent 35 percent of all seedling-size trees. Despite the many small beech and ash trees, these species will likely decrease in importance in New York's forests because of insects and diseases. It is unlikely that many beech trees will reach a large size because of beech bark disease. This will limit the future availability of beech and ash for producing timber products and for producing hard mast for wildlife.
- Ash mortality is not currently high but will likely increase as emerald ash borer spreads in New York. Emerald ash borer is expected to cause significant costs to municipalities, property owners, and the forest products industries in the State.
- New York has more hemlock volume than any other state. As hemlock woolly adelgid continues to spread north and west from the Catskill-Lower Hudson areas into the rest of the State (likely over the next two decades), it will move into forests where densities of eastern hemlock are considerably higher. *Editor's note: Hemlock Woolly Adelgid is here in the southern tier already.*
- Much of the timber growing is of low value because of species and quality. Volume increases occurred across all hardwood tree grades, and though the proportions of total board-foot volume by grade remained nearly unchanged, volume increased more in the tie/local-use class than in the higher valued grades 1 and 2.



## News, Notes and Workshops for Farmers and Gardeners

### Learn to farm online this winter from NE Beginning Farmer Project

Winter is a great time for farmers to rest, slow down the pace, and build new skills for the coming growing season. The [Cornell Small Farms Program](#) is pleased to announce the winter roster of online courses available through its [Northeast Beginning Farmer Project](#). These courses help farmers learn from the latest research-based education.

Since 2006, the program has offered high quality, collaborative learning environments online and each year educates hundreds of beginning and established farmers through these courses.

**Are there courses for me?** From aspiring to experienced farmers, there is a course for nearly everyone. There's a [handy chart](#) on our course homepage to direct you to the right courses for your experience level.

**What are the courses like?** All of our courses consist of weekly real-time webinars followed by homework, readings, and discussions on your own time in an online setting. If you aren't able to attend the live webinars, they are always recorded for later viewing.

**Qualify for a 0% interest loan!** Participants who complete all requirements of one or more online courses are eligible to be endorsed for a 0% interest loan of up to \$10,000 through Kiva Zip.

**Each course is \$200, but up to 4 people from the same farm may participate without paying extra.** See the course description page for more on the course learning objectives, instructors, and outline

[Learn which courses would be best for you](#), [read about our team of experienced instructors](#), see answers to [Frequently Asked Questions](#), and [view the calendar of course offerings](#).

*Courses often fill very quickly, so don't miss your chance to sign up today!*

### Winter 2016 Online Course List

[BF 102: Markets and Profits - Exploring the Feasibility of Your Farming Ideas](#) Jan 14 - Feb 28

[BF 120: Veggie Farming - From Planning to Planting](#) Jan. 13 - Feb. 17

[BF 140: Small-scale Organic Grain Production - Is it Right for Your Farm?](#) Jan 19 - Feb 23

[BF 151: Intro to Maple Syrup Production](#) Jan 12 - Feb. 16

[BF 201: Effective Marketing - Sell Smarter, Not Harder](#) Jan 11 - Feb 21

[BF 203: Holistic Financial Planning - Building Profit into the Picture](#) Jan 20 - Feb 24

[BF 231: Grazing Management - Improving Your Triple Bottom Line](#) Jan 14 - Feb 18

[BF 121: Veggie Farming - From Season-Long Care to Market](#) Feb 24 - Mar 23

[BF 150: Farm-Scale Mushroom Production - For Fun and Profit](#) Feb 23 - March 29

[BF 202: Planning to Stay in Business - Writing Your Business Plan](#) Feb 4 - March 10

[BF 103: Taking Care of Business - Understanding the Business, Regulatory, and Tax Implications of Your Farm](#) Mar 7 - Apr 11

[BF 220: Season Extension with High Tunnels - Know Before You Grow](#) Mar 22 - Apr 19

For more information contact:

<http://www.nebeginningfarmers.org/online-courses/>

*Editor's Note: Folks, these are great introductory courses to help you make your new farm venture successful. Whether you have been thinking about starting a farm or have been keeping some livestock and are considering selling some, these courses will help you on your way. Couple the knowledge that you get from these courses with local help from your Cornell Cooperative Extension staff and you feel supported every step of the way.*

### ROPS program even more affordable!

The New York ROPS Rebate Program will rebate 70% of the cost of purchasing and installing the ROPS (Rollover Protective Structure) up to a maximum out of pocket cost of \$500. That's right!! If your out of pocket expense is greater than \$500 then we will increase the rebate to ensure your cost is capped at \$500. This includes the cost of a certified rollbar, shipping, and professional installation charges (if desired). Under the new guidelines sun canopies will no longer be included in the rebate and used certified ROPS are allowable only if none are commercially available. Contact NYCAMH at 1-800-767-7748.

## Organic Dry Bean Discussion

December 1, 9am-1pm. CCE Ontario County, 480 N. Main St., Canandaigua, NY. Discussion and networking will continue on the potential opportunities and challenges of increased organic dry bean production in New York State. The demand for organic dry beans continues to increase. While there are a number of growers producing organic dry beans in NY it is a very small percentage of the total dry bean production in the state. The interest in this topic is broad based, and includes growers, shippers, processors, brokers, NY Certified Organic, and NOFA-NY. Topics covered will include: the exploration of the demand for increased organic dry bean production, the discussion of the specifics of producing organic dry beans, the discussion of organic certification of farms and facilities, and brainstorming matching organic dry bean production with cleaning capacity. All those interested in organic dry bean production and marketing are invited to join the discussion at Cornell Cooperative Extension Ontario County. There is no charge but please preregister by Tuesday, November 24. Contact Carol MacNeil at [crm6@cornell.edu](mailto:crm6@cornell.edu) or 585-313-8796.

## Developing a Feeder Calf Pooling Program in the Southern Tier

Wednesday, December 2<sup>nd</sup> 6:00 to 8:00 p.m. Bath Civil Defense Center; State Route 54A. The Tri County Graziers invite you to come and learn about prospective pooling of feeder calves in the Southern Tier. Research in New York and many states has consistently shown that large groups of uniform feeder cattle command a premium price. Yet, as most beef herds in New York have less than 25 cows, maximizing price is difficult unless they pool their cattle with other like-minded producers. Michael Baker, Cornell Beef Cattle Extension Specialist will describe what a feeder calf marketing program would like. Producers can learn the ins and outs and decide if pooling feeder calves might be a good option for their farm. In addition to a possible feeder calf pool, Dr. Baker will discuss the new Beef Farm Business Summary, a tool that will help producers evaluate their beef farm business and make positive, profitable and timely decisions for the farm. This event is free and open to the public. Cornell Beef Farm Account Books will be available for \$12. For questions or more information, please contact Kerri Bartlett at Cornell Cooperative Extension - Steuben at: [ksb29@cornell.edu](mailto:ksb29@cornell.edu) or (607-664-2300). This event is sponsored by the Tri-County Graziers and Cornell Cooperative Extension.

## Quickbooks for Farms

Thursday, December 10th, 2015- 5:30 p.m. held at Cornell Cooperative Extension of Broome County. 840 Upper

Front St, Binghamton, NY 13905. Whether you operate a dairy, sell at a farmers market or have an agri-tourism operation, or even sell wholesale or freezer trade this workshop is for you! Pre-registration is requested. Please come to the workshop with QuickBooks already loaded onto your laptop (if you have one). If you don't have the software we will have a computer loaded with it so you can "test drive" it. The cost is only \$15.00/per person. To register please call 607-584-9966 or visit: [https://reg.cce.cornell.edu/quickbooksforfarms\\_203](https://reg.cce.cornell.edu/quickbooksforfarms_203) to register and pay online.

## Markets and Profits BF 102

Jan 14-Feb 28- Exploring the Feasibility of Your Farming Ideas. Have an idea for a farm enterprise but not sure if it's feasible? This course will get you started exploring the potential markets and profitability of your ideas. It picks up where *BF 101: Square One* left off, so follows a natural learning progression from that course. (You do **not** have to take *BF 101* before taking *BF 102*; however, you will likely get more out of *BF 102* if you go into it with some existing knowledge of the concepts and terminology commonly used in business planning). Please visit <http://www.nebeginningfarmers.org/online-courses/all-courses/bf-102-markets-profits/> for more details and to register.

## 2016 NOFA- NY Winter Conference

Jan 22-24 2016- 34<sup>th</sup> Annual organic farming and gardening conference in Saratoga Hilton and City Center, Saratoga Springs NY. Please visit- <http://www.event.com/events/2016-winter-conference/event-summary-bf38f07d98c0412e8d06fb4ae29fa39e.aspx> for more details and registration.

**SAVE THE DATE!** In past years the **Winter Green-Up Grazing Conference** has taken place the last weekend of January. This year there is a change. The 2016 Winter Green-Up is FEBRUARY 12-13! If you are a past participant in the Winter Green-Up you will receive the annual registration form and the emails. The Northeast's premier Winter Green-up Grazing Conference is February 12-13<sup>th</sup>, 2016 at the Century House in Latham, NY. The outstanding speaker line-up includes Canadian mob-grazing pioneer, Neil Dennis, as well as ranching profitability guru, Chip Hines. For conference details and registration information, please visit: (insert link). Don't delay as this conference is sure to sell out, and early-bird rates apply through December 31<sup>st</sup>. To register: [https://reg.cce.cornell.edu/WGU2016\\_201](https://reg.cce.cornell.edu/WGU2016_201). Sponsored by Cornell Cooperative Extension of Albany County and Black Queen Angus Farm, LLC.

## The 'Speck'-ter haunting New York tomato fields

Boyce Thompson Institute for Plant Research press release 11/9/15

The 2015 growing season was a tough one for tomato researchers at the Boyce Thompson Institute, as bacterial speck disease descended on their field, but those infected plants may one day save others from a similar, spotted fate.

Cool weather and heavy rains in early summer created the perfect environment for speck--a bacterial disease that attacks tomatoes, causing dark spots on leaves and fruits and withered flowers. The outbreak of speck turned Boyce Thompson Institute's tomato field in Freeville, New York into a withered, mottled mess.

When BTI tomato researchers saw spots, farm manager Steve McKay called in Chris Smart, a plant pathologist at Cornell University's Geneva campus, and BTI Professor Greg Martin to diagnose the problem. Martin specializes in the study of tomato's interactions with the bacterium that causes speck, *Pseudomonas syringae* pv. tomato.

"This year speck really has been devastating to a lot of growers throughout the state of New York and to some researchers too," said Smart.

Since 2009, speck has been an issue for commercial producers in upstate New York who grow heirloom and fresh market tomatoes--the kind on grocery store shelves. Most of the tomatoes that end up in ketchup and tomato sauce, called processing tomatoes, carry a gene that makes them resistant to the bacteria.

"Although it creates serious problems for growers, the outbreak gives us the opportunity to observe if any established or experimental varieties have resistance to the local strains of the bacteria," said Martin.

The tragedy of bacterial speck disease is that once farmers identify the problem, it likely has already progressed to a point where it is very difficult to control. In a bad year, growers can lose whole fields. "There are very few control products for bacterial diseases of vegetables," said Smart. "If the symptoms are present in the field, the only thing they can do is to spray copper-based bactericides."

Because controlling speck once it takes hold is so difficult, prevention is key, said Smart. Growers should buy certified clean seed that is free of bacterial diseases, or they can heat treat their own seeds. They should also thoroughly clean all equipment, including trellis stakes, nursery flats, and greenhouse benches with a sterilizing solution.



A tomato showing signs of bacterial speck. Photo credit: Greg Moore

The bacteria survive in plant debris in the soil for up to three years, so Smart recommends rotating crops so that tomatoes--or related crops like peppers, eggplant and potatoes--grow in a field once every three years.

A farmer's best chance against speck is to use tomatoes that are naturally resistant. The gene present in processing tomatoes gives resistance only to types of *Pseudomonas syringae* pv. tomato designated as race 0. Another type, classified as race 1, has become much more common in recent years.

"There isn't any resistance to race 1 strains in cultivated tomatoes," said Martin. "I have gotten more interested in race 1 strains because they're emerging as more and more of a problem."

In a new paper published in *The Plant Genome*, Martin reports finding a segment of DNA from a wild relative of the cultivated tomato, which imparts resistance to race 1 bacteria. To find this stretch of chromosome, dubbed qRph1, researchers in his lab screened seeds from the Tomato Genetics Resource Center at the University of California at Davis. One sample of the fuzzy, green-fruited species *Solanaum habrochaites*, collected from Ecuador, showed resistance. They hybridized it to a cultivated tomato and then did the genetic work to map out the location of the gene.

In future work, they will continue their breeding experiments to generate a variety of the cultivated tomato that carries the qRph1 resistance gene. The work highlights the importance of using wild relatives of cultivated crops as a source of valuable traits that have been lost through domestication.

Martin and Smart plan to use the speck-infested Freeville field next year to field-test different plants' resistance to the natural speck strains there. With any luck, they'll find resistance genes in wild tomato plants that may spare future New York farmers from plowing under a speckled crop.

## ARS Study Shows No Damage to Soils from Grazing of Cover Crops

By [Dennis O'Brien](#)  
February 11, 2015

A [U.S. Department of Agriculture](#) (USDA) scientist in North Carolina has found a way to encourage more growers to use cover crops in the Southeastern United States—allow cattle to graze on them.

Cover crops reduce soil erosion, boost organic matter, keep more moisture in soil and sequester carbon in the soil so less of it is released as a greenhouse gas.

Conventional wisdom holds that if cattle were allowed to graze on cover crops they would eat up and remove the nitrogen and carbon otherwise left on the soil in the cover crop plant residue. Allowing cattle to tread on the soil also could compact it, preventing air and water from passing through the soil to reach plant roots.

[Alan Franzluebbers](#), an ecologist with the [Agricultural Research Service](#) (ARS) [Plant Science Research Unit](#) in Raleigh, conducted a 7-year study to see if grazing on cover crops affects the health of soils typical in the Piedmont region. ARS is USDA's principal intramural scientific research agency, and this research supports the USDA priority of promoting sustainable agriculture.

Franzluebbers and his colleagues grew winter or summer grains and used cover crops for both in the off-season. They also compared no-till versus tilling, and grazing versus no grazing. Cow/calf pairs were allowed to graze at a rate of one pair per 4 acres.

The researchers took periodic samples of the surface foot of soil. The study was the first in the region to analyze the practices for such an extensive period.

The results showed that the relatively low-level of grazing did not significantly affect the amount of organic matter in soil and did not compact the soil. They also showed that cover crops provided high quality forage and that the organic matter lost by allowing cattle to graze on cover crops was likely made up in the organic material supplied as manure. As in previous studies, they also found that no-till soils generally contained more carbon and nitrogen than conventional till soils.

## Salt Damage on Turf

Look for it along walks, driveways, and roads.

Look for bare spots or invasion by salt- and compaction-tolerant weeds along sidewalks, driveways, and roadsides. Soil is sometimes covered with white or yellow crust. Sodium chloride (salt) used for de-icing causes the problem. Salt damage is often compounded by compaction from foot traffic, auto tires, and piled snow. Even if the damage is not enough to kill sod, it increases stress on the grass, making it more prone to diseases and weed competition. Weak turf in these areas is especially vulnerable to runoff into storm sewers and surface waters.

Kentucky bluegrass is very sensitive to salt damage. Perennial ryegrass, fine fescues, and tall fescue are more tolerant. To prevent salt damage, avoid plowing or shoveling salt-laden snow onto turf. Apply only enough salt to do the job **after** you remove the snow. Calcium chloride-based de-icing salts don't cause as much damage as sodium chloride. Even though it's often suggested, **do not use urea or other fertilizers** as de-icing salts. They can run off when snow melts and pollute surface and ground waters.

Spring rains may leach salts from the soil if drainage is adequate. If it's dry, you may need to water by hand to flush them out.

If soil is poorly drained, improve it by mixing in organic matter to a depth of 6 inches, or remove soil and replace it with fresh topsoil and reseed. Improve soil before reseeding because salt can prevent germination and damage seedlings.



## Pilot Project Looking for Fruits and Vegetables

The New York State Office of General Services is looking for vendors to participate in the USDA's Pilot Project for Unprocessed Fruits and Vegetables. The goal of the Pilot Project is to develop opportunities for schools to purchase fresh fruits and vegetables with USDA funding, and develop new relationships with farmers, growers, produce wholesalers and distributors. This is a great opportunity for farmers, growers and food hubs to grow and expand their local customer base. Vendors of all sizes are encouraged to apply. For more information, contact Diane Green at the NYS Office of General Services at (518) 473-9386 or [Diane.Green@ogs.ny.gov](mailto:Diane.Green@ogs.ny.gov).



**FROST-KLOSSNER-SWAN**  
INC

**Independent Insurance Agent**

Homeowners & Renters - Mobile Homeowners -  
Farmowners - Business - Worker's Compensation - Auto -  
Life - Bonds - Health & Disability

**P.O. Box 488 - 14 North Main Street, Newark Valley, NY**

**(607) 642 - 3224**

**[www.fksinsurance.com](http://www.fksinsurance.com)**

## New Cherry Tomato for Hanging Baskets Developed at University of New Hampshire

A University of New Hampshire scientist has developed a new cherry tomato designed to be grown in hanging baskets in greenhouses. Rambling Rose provides a new attractive pink fruit color not yet available in cherry tomatoes suitable for hanging basket production.



The fruit was developed by Becky Sideman, a researcher with the NH Agricultural Experiment Station and extension professor of sustainable horticulture production, and her collaborators Elisabeth Hodgdon at the University of Vermont and Jennifer Noseworthy of Gordon College. Both are former UNH graduate students and worked on the development of Rambling Rose while at UNH.

Rambling Rose originated from self-pollinating a single hybrid Tumbler cherry tomato plant at UNH in 2009. Tumbler was selected as the parent material due to its desirable uniform growth and fruiting habit. Plant selections were made in subsequent generations using pedigree selection, choosing the best plants from the best families grown in both greenhouse and field settings at the NH Agricultural Experiment Station, until uniformity in plant and fruit phenotype was achieved in the seventh generation of plants.

“Our goal was to select plants with attractive and symmetrical branching, uniform leaf canopy, and plentiful fruit set. Because hanging basket tomatoes are grown not only for their yield, Rambling Rose was developed with aesthetics of vegetative growth in mind as well,” Sideman said.

Those interested in commercial seed production should contact Becky Sideman, University of New Hampshire, G48 Spaulding Hall, Durham, NH 03824. Small samples of seed for research or trial are available.



**Cornell University**  
**Cooperative Extension**

***Building Strong and Vibrant New York Communities***

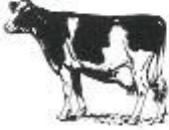
*Cornell Cooperative Extension in Tioga County provides equal program and employment opportunities.  
Accommodations for persons with special needs may be requested by calling 607-687-4020.*

## Thank you Sponsors!

This newsletter reaches approximately 1,200 farmers and gardeners in Tioga and Chemung Counties every month. It is made possible through the generous support of our sponsors! Help us provide information to the public by becoming a sponsor!

**Bloomin' Great!**

**FIELDS OF DREAMS**  
Premium  
**COMPOST**



56 Foote Crossing Road  
Candor, NY  
(607) 760-1957



**W&W**  
**NURSERY & GARDEN CENTER**  
906 Marshland Rd., Apalachin  
(607) 687-0305 • [www.nursery.com](http://www.nursery.com)

“Let’s Grow Green Together!”




**Tioga State Bank**

Offices conveniently located at these locations

|            |          |           |
|------------|----------|-----------|
| Binghamton | Newfield | Van Etten |
| Candor     | Owego    | Vestal    |
| Endwell    | Spencer  | Waverly   |

**WE SUPPORT AGRICULTURE!**



Member FDIC • Equal Housing Lender

To Serve  
And  
Strengthen  
Agriculture



Local Farms,  
Local Food,  
Local People



*Members are at the heart of Farm Bureau, a grassroots-driven organization of families and individuals in New York who care about agriculture.*



**Chemung County Farm Bureau**  
Giving farmers and agricultural supporters the opportunity to be part of an organization dedicated to maintaining and enriching the rural way of life

**Join Today!**



800.342.4143  
NYFB.org

