FARM & GARDEN

Cornell University
Cooperative Extension
Chemung & Tioga Counties

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

November 2018

News From CCE

By Barb Neal, CCE Tioga

Wow! There are so many wonderful workshops coming up! Want to get into the holiday spirit making beautiful crafts? Come to the gourd workshop and transform small gourds into beautiful ornaments—anyone can do it! Join us for Wine and Wreaths in the amazing Cloud-croft Studio barn and go home with your own sweet-smelling wreath. Learn how to grow unusual fruits at home—taught by an expert grower. Think about transitioning your farm to the next generation in one workshop, and learn about different business structures in another.

I know that we are all tired of this wet weather—a great way to beat the rainy day blues is to learn something new. Come join us!

Happy Thanksgiving!

Inside this issue:

Make some beautiful Gourd ornaments! All supplies provided. $15. class fee includes making 6 ornaments.

Saturday, December 8th

10 am to noon

56 Main Street, Owego

Barb Neal, CCE Tioga Agriculture and Horticulture Educator, ban1@cornell.edu

Missy Bidwell, CCE Tioga Community Food Systems Educator

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Mary Kate Wheeler, SCNY Farm Business, mkw87@cornell.edu

Dear Tioga County Community Members,

Are you interested in or part of our local food system? Would you like to learn more about it and/or improve it?

If so, please come to one of the "Tioga County Food System Focus Group Sessions" below that Cornell Cooperative Extension of Tioga County will be hosting.

Session 1: Monday, November 5th at Waverly Village Hall, Ithaca Street, Waverly from 6 to 8:30 pm.

Session 2: Tuesday, November 6th at CCE Tioga Conference Room, 56 Main Street, Owego, NY from 2:30 pm to 5:00 pm

Session 3: Wednesday, November 7th at Berkshire Community Center, 11 Jewett Hill Rd, Berkshire, NY from 9 to 11:30 am

If you plan to attend one of the sessions, please RSVP by November 5th by calling **Missy Bidwell at 607-687-4020 ext. 304 or e-mailing her at mlc52@cornell.edu .** Please indicate which session you would like to attend and include your contact information. There is no cost. Space though is limited to 15 people per session.

Want to know more about this? Here is some background on this project:

This past summer Cornell Cooperative Extension of Tioga County had the pleasure of working with an intern from Cornell University, Anna Birn, who helped us kick off our work on the "Community Food System Development Framework for Change." The framework was developed by Amanda Perez from Arkansas University as a tool for individuals and communities to use in assessing their local food system.

Our Executive Director, Andy Fagan, after seeing a presentation on this framework last summer approached Amanda and asked if we could pilot it Chemung and Tioga Counties. He worked with Prof. Todd Schmit, Barb Neal, CCE Tioga Ag Program Leader and Shona Ort, CCE Chemung Ag Program Leader, to apply for financial support for two Cornell interns. In addition, he reached out to include Anu Rangarajan, Director of the Cornell Small Farms Program and Heidi Mouillesseaux-Kunzman, CU Community Development Institute.

As part of this project, Anna and the team developed a series of surveys that were aimed at 3 distinct aspects of the food system. The first of these surveys was geared towards consumers and everyone who partakes in consuming food. In this survey individuals were asked questions that pertained to what things influenced consumption habits, how folks felt about their consumption habits, and whether or not folks had an understanding of the other aspects of the food system.

The second group of these surveys was focused on food distributors and places of food sales which include food distribution companies, grocery store, etc. In these surveys, questions were asked about how much of the products were sourced locally and what influenced the procurement of products. Finally, there was the survey geared towards producers which included farms, farm related business, value added producers, etc. In these surveys, questions were asked in regards to the marketing of products, perceived opinions of consumers, and aspects in regards to the sustainability of their production and business.

Fortunately, we were able to get a fair amount of data back from these surveys in particular from the consumer and producer groups. At the moment we are working on summarizing the data from these and ready to take the next step as outlined by Amanda Perez in her framework.

This next step in the framework is to bring together community members to discuss the findings of these surveys in order to identify gaps which are present in the food system and to begin to brainstorm how they can be addressed. This is where you all come in! Please join us for one of the focus group sessions where we will share the survey results, existing data related to our Tioga County food system, and engage you in a discussion about food production and consumption. Your input will help define what exists and what we need to do to improving our local food system.

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.

. Weeds? If you can beat them, eat them!

By Ken Wida, Chemung County Master Gardener

With any edible wild plant don't eat it unless you are positive of its identification. Be sure it has not been exposed to chemical sprays or pollution, especially if it is alongside the road.

There are many wild plants that our ancestors used as food that have all but been forgotten today. I remember my Grandmother cooking with Dandelion leaves when I was a youngster. Some of the plants that are called weeds today have more nutritional value than foods we buy in the store. Let's take a look at a few of the most common plants that could serve as free food.

Lambs Quarters

The leaves and stems are edible and delicious. They have a flavor similar to spinach or chard. If you enjoy leafy greens such as kale, collards, and spinach, you will like lambs quarter. The easiest way to cook lambs quarter is to simply steam the leaves and stems in a small amount of water until tender. The greens cook quickly and turn a dark green color as they shrink down during cooking.

Purslane

This plant is often be found in moist garden beds, lawns, and shady areas, where it lies close to the ground and often goes unnoticed. This humble garden weed, however, is a nutritional powerhouse; it contains more omega-3 fatty acids than any other leafy vegetable, and can be a great addition to a salad or stir-fry, or used to thicken soups or stews. Purslane is a succulent, with a crispy texture, and the leaves and stems can be eaten raw or cooked to add a peppery flavor to any dish.

Red Clover

This common lawn weed goes mostly unnoticed, but is an important food for honeybees and bumblebees. The leaves and flowers can add variety to meals. Small amounts of raw leaves can be chopped into salads or sautéed and added to dishes. The flowers of both red and white clover can be eaten raw or cooked, or dried for tea.

Plantain

A common lawn weed that is not only a great medicinal plant that can be used topically to soothe burns, stings, rashes, and wounds, but is also a great edible green for the table. The young leaves of plantain can be eaten raw, steamed, boiled, or sautéed, and while the older leaves can be a bit tough, they can be cooked and eaten as well. The seeds of the plantain, which are produced on a distinctive flower spike, can be cooked like a grain or ground into a flour

Dandelion

Dandelion leaves can be harvested at any point in the growing season, and while the smaller leaves are less bitter and more palatable raw. If raw dandelion leaves don't appeal to you, they can also be steamed or added to a stir-fry or soup, which can make them taste less bitter. The flowers are sweet and crunchy, and can be eaten raw, or breaded and fried, or even used to make dandelion wine. The root of the dandelion can be dried and roasted and used as a coffee substitute, or added to any recipe that calls for root vegetables.

Photo from NEIPM center

A Gardener's Holiday Gift Wish List

By Peg Weidemann, Master Gardener

Many of us are thinking about holiday shopping, and often there is a gardener or two on our list. The following items are either things that I have and love, or that are on my wish list:

Niteangel Natural Insect Hotel Bee Bug House/Hotel
$19.65 at Amazon
Honey bee populations are declining, but our native mason bees can help take up some of their pollinating duties. These bees, which commonly nest in pre-drilled holes rather than in bee hives, can't excavate their own holes, so giving them a bee house for shelter keeps them hanging around in the backyard. Many models available - see suggestions at https://beekeepclub.com/best-mason-bee-house/

Seed Savers Exchange Membership
"An annual membership to this national, non-profit seed back is a great gift for gardeners concerned about protecting heritage foods from extinction," says master gardener and Seasonal Wisdom blogger Teresa O'Connor. "The real treasures are the members-only newsletters and annual yearbook, which features expert growing tips, plant history and heirloom varieties you'll find nowhere else. $40; seedsavers.org

Fiskars Garden Bucket Caddy
Fits around your bucket, and holds weeding and pruning tools. Save your favorite gardener some trips! Approx. $10.00 - available from multiple sources

60 Gallon Rain Barrel

$96.99 from Wayfair
Rainwater is free, and is the best water for your plants. This rain barrel comes with a screen and screw on lid to prevent insects and debris from causing trouble. Lightweight but sturdy.

Nitrile Garden Gloves
The best light weight garden gloves I have ever used. Comfortable, flexible and one pair will last at least one year. Available for $5.95, or 2 for $5.00 from Gardener's Supply Company. If you have multiple gardeners on your list a 6 pair pack is $18.15 on Amazon! (6 Pack Showa Atlas NT370 Atlas Nitrile)

Felco F-2 Classic Manual Hand Pruner ($49.97)
Or
Felco F-6 Classic Pruner For Smaller Hands ($40.55)
from Amazon
Expensive, but this is a forever tool. Worth it!

Lifetime 60065 Raised Garden Bed, 4 by 4 Feet, 1 Bed

$69.88 at Amazon
Instant raised bed garden! Be sure to include a gift certificate for garden soil to fill it!

Gardening Clogs

Many styles and colors of these handy slip-ons can be purchased online or at garden stores. My favorites are Sloggers.

Last, but not least, many a gardener has been made very happy by a promissory gift certificate for a spring delivery of garden mulch or compost. Some help spreading it would also be appreciated.

Merry Christmas, Happy Holidays, and Happy Gardening!

Growing Unusual Fruits at Home

Date: Wednesday November 7, 2018
Time: 2:30 to 4:30 pm
Location: Cornell Cooperative Extension of Chemung County, Room 110
Address: 425 Pennsylvania Ave, Elmira NY 14904

Are you interested in learning more about growing unusual fruits? If so, please join us for this upcoming workshop. Roger Ort, Local Foods and Agriculture Educator with CCE Schuyler, will be covering the basics of growing Bush Cherries, Currants, Figs, Gooseberries, Hardy Kiwi, Honeyberries, Lingonberries, and more.

Cost to attend is $5 per person. Youth 12 and under are welcome and free. Preregistration is required by Tuesday November 6, 2018 since seating is limited to 25 people. For more information and to register, please contact Shona Ort, CCE Chemung, at 607-734-4453 ext 227 or sbo6@cornell.edu.

Note: This is an introductory level class. Please ask to be added to our email list in order to be updated about more advance classes in the region.

Cornell Cooperative Extension
Chemung County

Helping You Put Knowledge to Work

‘Turbocharging’ photosynthesis increases plant biomass

By Blaine Frielander

Scientists from the Boyce Thompson Institute and Cornell have boosted a carbon-craving enzyme called RuBisCO to turbocharge photosynthesis in corn – promising to improve agricultural efficiency and yield. Above, Coralie Salesse, left, and David Stern examine corn stalks in a BTI greenhouse, as part of their research on enzymes and boosting photosynthesis. Photo by Jason Koski/Brand Communications

Scientists from the Boyce Thompson Institute (BTI) and Cornell have boosted a carbon-craving enzyme called RuBisCO to turbocharge photosynthesis in corn. The discovery promises to be a key step in improving agricultural efficiency and yield, according to new research in Nature Plants, Oct. 1.

Increased RuBisCO assists corn’s biological machinery used during photosynthesis to incorporate atmospheric carbon dioxide into carbohydrates.

“Every metabolic process – like photosynthesis – has the equivalent of traffic lights or speed bumps,” said plant biologist David Stern, president of the Cornell-affiliated BTI. “RuBisCO is often the limiting factor in photosynthesis. With increased RuBisCO, though, this well-known speed bump is lowered, leading to improved photosynthetic efficiency.”

RuBisCO does have a formal, scientific name. It’s Ribulose-1,5-bisphosphate carboxylase/oxygenase, an enzyme that helps convert carbon dioxide into sugar. It’s generally accepted, said Stern, that it’s the Earth’s most abundant enzyme. But for the world of commercial agriculture and corn’s C4 (four-carbon compound) photosynthesis system, RuBisCO works slowly.

BTI researchers found a way to overexpress a key chaperone enzyme called RuBisCO Assembly Factor 1, or RAF1, to help make more RuBisCO “It needs help from other proteins to assemble itself,” said lead author Coralie Salesse, a Cornell doctoral candidate in the field of plant biology. With the chaperone enzyme, the scientists in effect lowered a different speed bump – one that limits the rate at which RuBisCO can attain the right biological architecture – leading the plants to accumulate more of it. The exact mechanism of how RuBisCO was assembled had been a mystery for many years, until the RAF1 and RAF2 proteins were discovered, said Salesse.

Salesse conducted research at the laboratories of Robert Sharwood and Florian Busch at the Australian National University and at the laboratory of Steven Long, University of Illinois. Salesse found that increasing RuBisCO causes greenhouse-grown plants to flower sooner, grow taller and produce more biomass.

“Corn is an important but land and energy-intensive crop, and reducing its environmental footprint is important. Just in this country, corn is grown on some 90 million acres, and nearly 15 billion bushels were produced in recent years,” said Stern, Cornell adjunct professor of plant biology. He explained there are different approaches to increasing biomass per acre, including boosting photosynthesis, which could increase the weight of each ear of corn and thus yield per acre. Stern noted – with this finding – that the same approach may have promise to improve yields in other C4 crops, such as sorghum and sugarcane.

“As we move from the greenhouse and into the fields, we hope to eventually observe improved growth and yield in production varieties,” he said. “Turbocharging RuBisCO has the potential to provide a foundation for profound effects on the corn plant’s ability to mature and produce biomass, especially when combined with other approaches.”

Other authors of “Overexpression of Rubisco Subunits With RAF1 Increases Rubisco Content in Maize” are BTI’s Viktoriya Bardal, who was an intern in the Stern laboratory, and Johannes Kromdijk from the University of Illinois. Funding was provided by the U.S. Department of Agriculture and the Mario Einaudi Center for International Studies.

Organic farmers and researchers utilize cover crops to reduce the labor and expense of organic mulches

by Brian Caldwell and Ryan Maher
Reprinted from http://smallfarms.cornell.edu/tag/cover-crops/

Organic mulches like hay or straw can suppress weeds and improve soil. They are used by many small scale vegetable farmers, but the cost of the material and application may be prohibitive for larger operations. However, there may be ways around this obstacle. In recent years, organic grain farmers and the Rodale Institute successfully pioneered a practice of using rolled/crimped rye cover crops as mulches grown in-situ for soybeans. What can organic vegetable growers in the Northeast learn from this approach?

Following up on farmer efforts, researchers at Penn State and Cornell University codified the practice. It is often referred to as "Cover Crop-Based, Organic Rotational No-Till". When winter rye is planted in mid-September in NY, it produces heavy biomass of 7500+ lb./acre, sufficient to suppress weeds when laid down in place as a mulch.

Fig. 1: Front-mounted roller/crimper.

In late spring, when the plants are tall and in flower, they are run over with a roller-crimper (Fig. 1), which knocks them down and kills them. Then, a heavy no-till planter is used to seed soybeans at a high density of about 250,000 seeds per acre, parallel to and in the same direction as the rolled rye. In fact, this can be done in one operation, with the roller/crimper on the front of the tractor and the planter behind. Usually, no weed cultivation is needed. Research plot soybean yields using this method are generally as good as or better than those of conventionally-tilled organic treatments.

Organic corn plantings have had less consistent success on both research and commercial farms. Whereas soybeans fix their own nitrogen, corn is a heavy nitrogen feeder. The soil often cannot supply enough N for both a heavy rye crop and subsequent corn plants. Attempts to remedy this by using hairy vetch mixtures as roll-crimped, N-supplying cover crops have given variable results, sometimes with poor weed suppression and low corn yields.

ll-crimped rye and pumpkins

ue to an even greater degree for cool northern climates. Plant-npkins directly into rye residue nventional growers in the mid-worked for organic farmers fur-nt of cover crop mulch pro-cient, and crop growth in low-N ugh to keep weeds down (fig. 2). mates, highly skilled organic short using this approach.

ea completely impractical in g but soybeans?

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Farmer creativity addresses the problem

Fig. 3: Tom Zilke planting melons in strips between mowed rye.

Michigan organic vegetable grower Tom Zilke made a fortuitous decision a few years ago. His rye cover crop had gaps between planter passes. In late May, rather than plowing the whole business under, he mowed the rye, crafted a shank to till the bare strips, and planted melons (fig. 3).

By narrowly tilling and fertilizing them, he allowed the melons to overcome the lack of fertility and rye root competition. The soil was easier to work, warmer around the plants than under the adjacent mulch, and there was plenty of room to re-mow the rye when needed. The crop succeeded though Tom found his melons grown on black plastic were more productive. Tom continues to "play around with this idea".

Fig. 4: Summer squash at Elderberry Pond Farm.

Meanwhile, in central New York, grower Lou Lego of Elderberry Pond Farm was working on a different angle. Lou mowed a thick rye cover crop with a sickle bar mower and planted winter squash into it by hand. He added a quart of compost into each planting hole. The high fertility he had built up over the years resulted in a thick mat of rye mulch, which suppressed weeds well; and the squash plants benefited from the dose of compost (Fig. 4). Once again, the crop was a success. Variations on this method are now Lou's standard approach for squash and pumpkins. Sometimes he combines black plastic mulch with the rye. The plastic creates a warmer, larger space for the squash roots between mowed rye strips.

Thus in some cases, "grow-mulch-in-place" methods have worked for cool area vegetable crops. Several insights and cautions have emerged from these farmer experiences:

Rye mulch can produce large biomass and suppress weeds when either mowed or roller-crimped. A heavy seeding rate, and proper timing of rye planting are important to maximize growth and weed suppression. Mid-September rye cover crop plantings get a good start in spring in NY.

It is possible to grow mulch in place and get sufficient yields. However, in many vegetable crop attempts, weed competition has been severe.

Low soil N may reduce growth of non-legume vegetable crops. Adding hairy vetch to the rye cover crop or supplementing with fertilizer or compost can help. But it is not clear how to best overcome low N problems, especially in more northern areas.

Lower soil temperatures under the rye mulch may reduce growth of heat-loving plants such as corn, melons, and squash.

Practices like strip tillage, that speed soil warming and increase microbial activity, can help transplants get off to a better start.

Rye regrowth may be a problem. Widely-spaced cash crops can leave room for additional mowing if necessary.

Making “Messy” Look Good

By Rhiannon Craine, Habitat Network/Yard Map

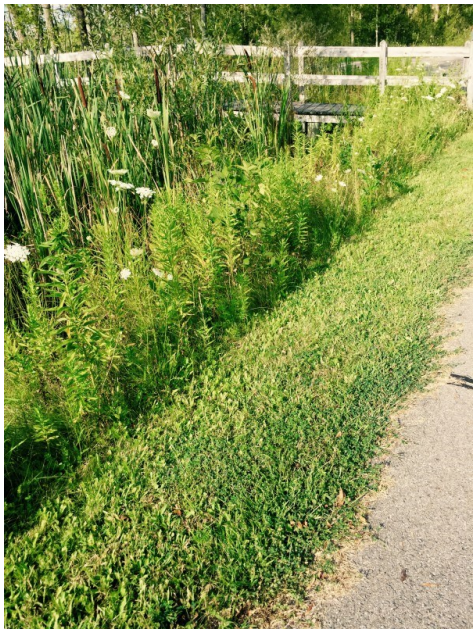
One of the top worries we hear about at Habitat Network from people considering wildlife-friendly landscaping (or even just reducing the size of their manicured lawn) is a fear that it will look too messy. Like it or not, native and wildlife -friendly gardening has a reputation for not being tidy. We think, with a few little tricks, however, you can make even the *wildest* yard look tame enough to fit in on your block.

Design can use cultural values and traditions for the appearance of landscape to place ecological function in a recognizable context.

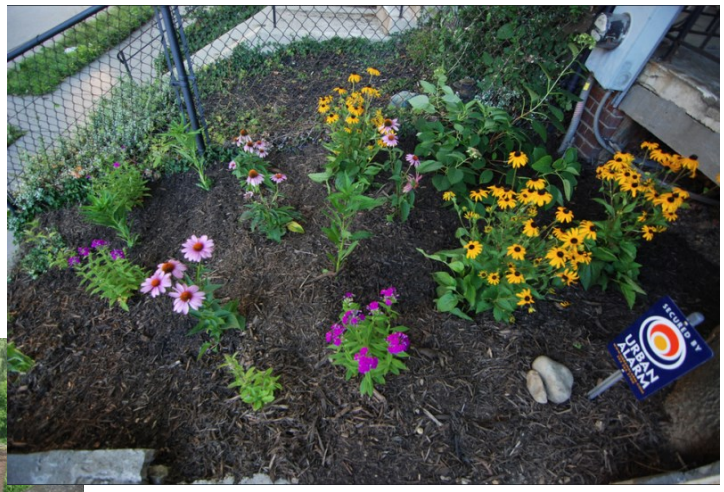
Joan Iverson Nassauer

When it comes to front yard landscapes neighborhood norms dominate people’s preferences. Research has shown that more than anything else, preferences for landscapes are determined by a set of implicit rules about what yards *should* look like. This is problematic when you want a landscape that not only appeals to your neighbors but also benefits wildlife. The solution? Including visible design cues of human intention in your wildlife-friendly landscape.

Mow the Edges. Meadows can be really beautiful, but in the context of a yard they can look unkempt, or even weedy. Mowing a thin strip along human paths, like streets and sidewalks, is a clear cue to onlookers that the property is actively managed and can transform “untidy” into elegant.



The grounds at the Cornell Lab of Ornithology in Ithaca, NY are maintained this way, and it results in a lovely space, not only for wildlife–since most of the open areas are left to grow wild–but for visitors and staff who enjoy wandering the maintained pathways.



Plants Wisely. Sometimes we make planting errors gatively affect the look of a space. One of these is e plant our annuals too far apart. Sometimes this is plants are expensive and the number needed to fill a as underestimated, and other times the spacing in- ns that came with the plant are misleading. In order rately space plants you need to take into account your planting zone (Don’t know it? Look it up on al Resources Page). In USDA Zones 2-5, annuals ed to be placed closer together by as much as a third f as close as the tags say. The northern growing season for annuals is five or six months, not the eight months

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that may be assumed on the planting tag. Space plants too far apart, like twelve inches for a salvia, and they won't fill out and start touching leaves until right around the first fall frost. (*note: Salvias are perennial in certain parts of the country, like California where there are at least 18 native species).*

On the other hand, perennials, like shrubs, are often spaced too closely together. As they grow to their full size they are crowded and look messy. Sometimes, they are pruned to within an inch of their lives when mature to keep from crowding out other landscaping (for more on this visit this great article from Houzz). It is important to take into account their full size when planting, even if it looks bare when they are first planted. Most perennials need to be spaced around eighteen inches apart; many larger perennials are best planted twenty-four or even thirty inches apart.

Massing and Drifting. Clustering plants, rather than just using one of everything, can really create a rhythm in an otherwise wild yard. Above, you can see the drama this planting of Salvia spathacea brings to this space. If it were just one plant it would lose a lot of its impact. Also called massing, or drifting, larger clumps of single varieties are known to attract certain pollinators because of the efficient foraging they offer, making them smart for wildlife tooopen_in_new.

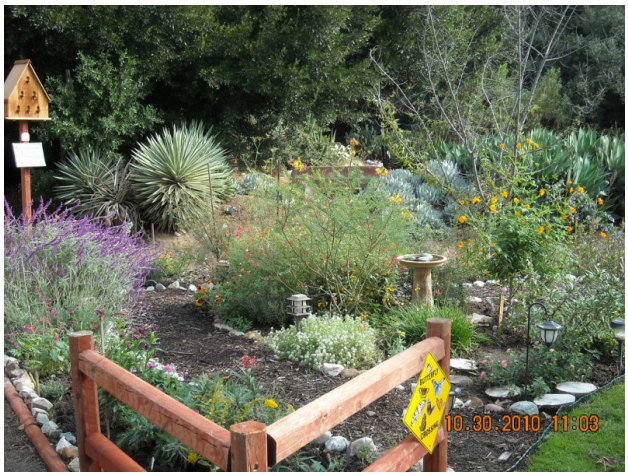
Think High and Low. Crisp edges and bold patterns in landscaping are another strong cue of management. One way to add this element to a space is to think about elements that are both high (like large shrubs and trees) and low (like many flowering annuals and grasses). All of one or the other can make a space look flat. Turns out this is good for wildlife as well since different animals utilize different kinds of structurefor foraging, hiding, reproducing, and displaying. The more a yard provides, the greater diversity of wildlife it has the potential to support.

Line of Sight. In the photo above notice how removing some of the vegetation makes the house visible from the street. This is one of those tricks for improving the perception of landscaping. House is hidden; and, as a result, the yard is seen as unkempt and overgrown. House is visible; and, suddenly a yard seems cared for.

Mix Woody and Herbaceous Plants. Above, we talked about the importance of high and low elements in a wild

garden. Here we emphasize the importance of including both herbaceous plants and woody ones, like trees and shrubs. Often doing this will help you bring that "high/low" dynamic into a space, but there are some woody plants that aren't high at all. Even so, these bring interest and a solidness to a space as the seasons change and herbaceous plants grow and die around the woody ones. A solid mix can also help solve some of the spacing issues described above.

Containers, Structures, Other Objects. Non-plant materials can go a long way towards defining spaces in your yard. The massive planter boxes depicted here elevate an otherwise messy collection of plants. You can accomplish this with a variety of materials such as rocks, paths, containers, and walls.

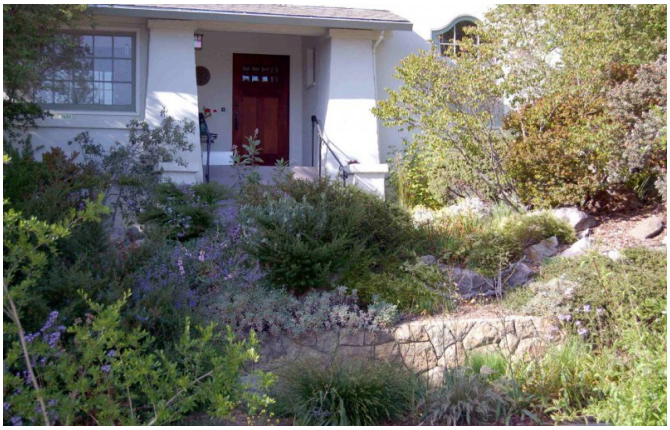


Wildlife-friendly Elements. Nestboxes, bee houses, and bird feeders and baths are another clear visual indicator to passers-by about the intentions of your landscape. Sprinkling these throughout your landscape can help people see that your planting choices are for the birds (or the bees).

READY FOR A NESTBOX?

We recommend checking out the NestWatch Project for nestbox plans that will work in your area.

Just Add White? This may seem too easy, but we've come across landscapers who swear that adding a white element to a garden in the form of a painted fence or house, is often interpreted as a sign of investment in a property by onlookers. We wonder if this is true for new coat of paint in general, of any color.



Something Linear. Some landscapers, like Pete Veilleux of East Bay Wilds, recommend adding at least one linear element to a wild garden. Examples include a stone wall, clipped hedge, or decorative fence, each of which pulls the eye across a landscape, bringing a clear visual order to a scene.

Cover the Foundation. Plantings to obscure house foundations are a nearly ubiquitously desired landscaping element. While the whole foundation should be hidden, make sure the plantings don't cover any doors or windows. You want the line of sight to these to be open.

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Err on the Side of Flowers. Skew plants towards those with large and showing flowers. While many trees, shrubs and herbs have smaller flowers, some natives are known for showy flowers (like Eastern Purple Coneflower (Echinacea purpurea), Black-eyed Susan (Rudbeckia fulgida), and Matilija Poppies (Romneya coulteri)). Using a disproportionately large number of these kinds of natives (disproportionate to their normal occurrence in a natural landscape) indicates that this is a designed space.

If you enjoyed this article, visit the website for Habitat Network—which uses Yard Map to map the ecosystem benefits of your home landscape.

What a great thing to do to learn more about how your property can benefit wildlife! And the articles are top-notch!

http://content.yardmap.org/

Pop up Thanksgiving Farmers' Market in Candor

Just in time for your holiday meal shopping needs is a pop up Farmers' Market!!

Dress for the weather and stop by the Candor Farmers' Market on Tuesday, November 20th from 3:30 to 5:30.

Baked goods, veggies and more!

Support your local farmers and serve your guest delicious, healthy food!

Where: Candor Farmers' Market on the grounds of the Candor Town Hall, Rt. 96B

When: November 20th, 3:30 to 5:30

Farmers: if you would like to be in this market, email or call Barb Neal, ban1@cornell.edu or call 607-687-4020

Cloud Croft Studio and Cornell Cooperative Extension

Wreaths & Wine

CCE Tioga hosts wreath making and wine tasting at Cloud Croft Studio
1003 Sanford Rd, Owego

$30 per person

Cloud Croft Studios

Cornell Cooperative Extension

Tioga County

You Are Invited To Attend

2018 Friend of Extension Dinner and Annual Meeting

Monday, December 10th, 2018 from 6 - 8:30 pm

in the Broome Room at Tioga Downs Resort & Casino

$25 per person

Please join us in recognizing:

4-H Youth Development - Katherine Guiles

Family Development - Beth Harrington

Agriculture and Horticulture - Eleanor Ernest & Angie Smith

Community Development and Public Issues - Stray Haven Humane Center & SPCA

Campus Collaborator - Dr. Betsy Lamb

Spirit of Extension - Tioga County Agricultural Society

Friends of CCE Tioga - Tom & Linda Gartung

Board and Staff members

Please RSVP by November 30th by calling 687-4020

Send a check with your name to 56 Main Street, Owego NY 13827

or send an email to Tina Murphy at tlm8@cornell.edu

Helping You Put Knowledge To Work

Serving Tioga County since 1915

WIREWORM BIOCONTROL UPDATE – CONTRIBUTED BY TERESA RUSINEK

SEPTEMBER 28, 2018 AMARA DUNN

Sweet Potato with wireworm damage from EPN biocontrol trial (Photo credit: Teresa Rusinek)

A lot of great people are doing great work with biocontrols. So this month I'm featuring an update from an exciting project happening in Eastern NY testing a potential biocontrol solution to wireworms in sweet potatoes. Thank you to Teresa Rusinek (Cornell Cooperative Extension Eastern NY Commercial Horticulture Program) for writing this post! I will definitely be following this project as results from 2018 come in. Check back for future updates!

Professor Elson Shields and Research Specialist Tony Testa of Cornell Dept. of Entomology, have been working with NY native entomopathogenic (insect attacking) nematodes (EPNs) for the past 20 years. Initially, the EPN biocontrol systems were developed to protect alfalfa crops from the destructive snout beetle. This system has been highly successful, over 150 alfalfa fields in NY alone have been inoculated. EPNs have been proven to persist in the soil years after application. They require 2-4 years for full effectiveness determined by the application method.

Cornell Cooperative Extension, Eastern NY Commercial Horticulture Educators Teresa Rusinek and Charles Bornt have been working with Shields and Testa on a multi-year research project at the HV Farm Hub to test the efficacy of NY Native EPNs in the suppression of wireworms which are increasingly damaging to various crops, especially roots crops, grown in the Hudson Valley.

Our project began in May of 2017 at the Farm Hub, where we established research plots in a field where wireworms were found in large numbers. Four control plots had no EPNs applied, four plots were treated with both *Steinernema carpocapsae* (Sc) and *Steinernema feltiae* (Sf) nematodes, and the final four plots were treated with Sf and *Heterohabditis bacteriophora* (Hb) nematodes. Each EPN species occupies a different depth in the soil and has somewhat different modes of action. This research will determine which nematodes species are best adapted to establish in the field as well as which combination of nematodes is most effective at suppressing wireworms.

Entomopathogenic nematodes are reared in wax worm hosts and strained into a solution that is applied to the soil. (Photo credit: Teresa Rusinek)

Results from our harvest evaluation from last year look very promising. 200 sweet potatoes were harvested from each plot on Sept. 26, 2017 and scored for wireworm damage. EPN treated plots overall had 36% less wireworm damage than the untreated control plots. In addition, soil core bioassays taken earlier this spring show that the EPNs, Sf in particular, have well-established and overwintered in the treated plots. We have not yet harvested and evaluated the sweet potatoes from this growing season.

Cornell Cooperative Extension
South Central NY Dairy and Field Crops Program

Mary Kate Wheeler
CCE Tioga County
56 Main Street
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Basic Legal Agreements for Farm Business Management

WHO: Farm business operators and managers
WHAT: Workshop with Anna Richards from PRO-DAIRY
WHEN: 1:00—3:00 pm on Tuesday, November 27, 2018
WHERE: CCE Tioga County, 56 Main St, Owego NY 13827
WHY: Legal agreements can strengthen your business!

Whether large or small, all farm businesses face a variety of risks. What happens if a key person gets sick or injured, or decides to switch jobs? What happens if a visitor is hurt, or a consumer gets sick from your product? If a flood or drought impacts production, how will you pay all your bills? If the farm has a great production year, how much of your earnings will go to the IRS?

These are just a few of the questions that farm managers must consider when developing a strategy to manage risk. Legal agreements can help a farm businesses plan ahead, minimize risk, and respond to adverse events. Farmers have access to a wide range of legal tools to address specific concerns. These include lease agreements, buy-sell agreements, promissory notes, operating agreements, wills, and even prenuptial agreements.

Farmers interested in learning how legal agreements can strengthen their businesses are invited to attend a free workshop on *Basic Legal Agreements for Farm Business Management*. We are excited to host speaker Anna Richards from the Cornell University PRO-DAIRY program. Attendees will learn about different legal agreements that are commonly used in farm business management, with an emphasis on Operating Agreements for LLCs.

This is a free event, and pre-registration is requested. For questions or to register please contact Mary Kate Wheeler at mkw87@cornell.edu or 607-687-4020 x 309.

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Blueprint for Change

Navigating Dairy Decision Making

https://scnydfc.cce.cornell.edu/event.php?id=754

Friday, November 2, 12:30-3:00 pm

Broome County CCE, 840 Upper Front St, Binghamton NY

Topics focused on small and midsized dairy farms:

Discuss strategies and tools to manage change on your dairy

Dairy Acceleration Program provides funding assistance to take stock and move forward through:

- Analyzing operating efficiencies to improve your bottom line
- Planning for growth to accommodate a junior partner in the business
- Positioning your business for a successful transfer
- Planning the layout of future structures on the farmstead
- Comparing your financial performance to other dairies to identify strengths and opportunities for your business
- Planning and budgeting for environmental improvements

PRO DAIRY

Cornell Cooperative Extension

Cornell CALS
College of Agriculture and Life Sciences

FREE lunch & workshop sponsored by:

Chobani

To register call 607.391.2673 or email bjh246@cornell.edu

www.prodairy.cals.cornell.edu

Agricultural Grant and Incentive Programs for Veterans

By Zack Baker, Tioga County Economic Development & Planning

If you're a military veteran interested in getting started in farming or ranching, there may be several grant and incentive programs available to you. Although the application deadline has passed for this year in some cases, there is reason to believe these programs will be funded in future years.

NYS Veterans Farmer Grant Fund

Organization: Empire State Development (ESD)
Website: https://esd.ny.gov/new-york-state-veterans-farmer-grant-fund
Contact: nyveteransfarmfund@esd.ny.gov

This fund is intended to help improve the profitability of veteran-owned farms by expanding/diversifying production or advancing innovative agricultural techniques. The farm business must be at least 50% owned, operated, and controlled by a veteran, and must have a minimum of $10,000 of farm income as reflected in tax returns. Individual grants shall not exceed 50% of the total project cost and will range between $15,000 and $50,000.

Farmer Veteran Fellowship Fund

Organization: Farmer Veteran Coalition
Website: https://www.farmvetco.org/
Contact: (530) 756-1395

The Farmer Veteran Fellowship Fund is a small grant program that provides direct assistance to veterans who are in their beginning years of farming or ranching. The Fellowship Fund does not give money directly to the veteran, but rather to third-party vendors for items the veteran has identified will make a crucial difference in the launch of their farm business. Awards range from $1,000 to $5,000, and more than $1.9 million has been awarded to veterans since 2011.

Young, Beginning, Small, and Veteran Farmer Incentive Program

Organization: Farm Credit East
Website: https://www.farmcrediteast.com/products-and-services/new-farmer-programs/young-beginning-small
Contact: Janice Bitter at (607) 749-7177

Farm Credit East's Young, Beginning, Small and Veteran Farmer Incentive program (YBSV) is designed to help this growing customer segment get started in agriculture through special incentives to program participants. To be eligible, veterans must have served in the U.S. military anywhere in the world since September 2001.

Incentives include discounts on the following services for a period of up to five years:

- Farm accounting and management software
- Tax preparation
- Consulting
- Appraisal
- Discounts on Farm Service Agency guaranteed loan fees
- Interest rate assistance

TEAM TIOGA
we work for you

Succession Planning Kickoff Seminar For Farm Businesses

This year's conference will focus on addressing the *challenges surrounding succession planning* for farm businesses, including tax, legal and estate implications, family communication, and financial issues.

Speakers will include Steve Walker, Esq., Erica Leubner, MSW, of NY FarmNet, and John Lehr of Farm Credit East. In addition, a *diverse panel of producers* will share their experiences around business transition.

Following the program, producers will be able to sign up for a *three part follow up workshop series*, which will focus on helping the farm prepare to move forward with their transition planning process.

December 14th, 2018

Location: Doubletree Hotel, E Syracuse, NY

Time: 9am—3pm, Registration at 8am

Registration fee: $45 first farm attendee, $40 each additional farm attendee

Registration Information

Online using a credit card at:

https://cnydfc.cce.cornell.edu/events.php

Or by contacting Veronique at 315.866.7920 or vas8@cornell.edu

Questions? Contact Anna Richards at ar746@cornell.edu or your local Cornell Cooperative Extension Educator

Cornell University Founded A.D. 1865

PRODAIRY

NY FarmNet

Cornell Cooperative Extension
Central New York Dairy, Livestock and Field Crops

Cornell Cooperative Extension
Herkimer County

Cornell Cooperative Extension
Onondaga County

Cornell Cooperative Extension
South Central NY Dairy and Field Crops Program

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

Nut Bonanza & Fall Plant Sale

November 10 from 10am-5pm. Held at Twisted Tree Farm, 279 Washburn Road Spencer, NY. This family event is a celebration of the nut harvest. We'll be outdoors, roasting and cracking nuts all day, enjoying a bonfire, talking about trees and tasting things like acorns, American persimmons, chestnuts, hickory nuts, butternuts, hazelnuts and black walnuts. Suggested donation $5-$20 or bring a local food to share. Please visit www.twisted-tree.net for details or call 607.589.7937.

United States Farming Practices Survey- Throughout the United States, farmers are using innovative approaches to sustainably produce crops and improve soil health. However, farmers are also faced with numerous challenges, and they are often not included in decision-making that affects the way they farm.

Cornell University, University of California—Berkeley, and The Nature Conservancy are conducting a nationwide survey for all fruit, vegetable, grain, and field crop producers to identify the biggest challenges that farmers face, as well as the best solutions. Key findings from the survey will be published and communicated to grower organizations and other farmer advocates so that recommendations, actions, and outcomes reflect what growers identify as being most helpful for their operation.

All responses will remain **anonymous**. If you choose to enter your e-mail address at the end of the survey, you will receive a **summary report** of the findings and you will be eligible for a chance to win **$500**. The survey takes about 30 minutes to complete. ***You can fill out the survey right now by clicking on this link:***United States Farming Practices Survey Please also feel free to send to other growers and farmers for any crop!

Log-Grown Shiitake: Economics and Management for a Profitable Crop

Multiple dates and locations through out January and Feb- Please click this link to see dates and places. www.cornellmushrooms.org/viability. Learn more about cultivation at: http://cornellmushrooms.org/factsheets Those who attend one of the workshops or the online livestream are eligible to participate in an advanced training group and receive one-on-one support for the 2018 growing season. Details of this opportunity will be provided at the workshop. Also, a LIVE WEBINAR TRAINING: Friday, March 2nd online (access anywhere with a high-speed connection)See a Map of the locations: https://www.easymapmaker.com/map/2018LogShiitakeWorkshops

Workshops run from 9am to 4pm, with a catered lunch included.

To Register: visit www.cornellmushrooms.org/viability Cost: $30/person includes lunch and handouts. (online livestream 3/2 is $20 (no person turned away for lack of funds- contact sfg53@cornell.edu for info.) Funding for this project is provided by the USDA Specialty Crop Block Grant and administered through the New York Farm Viability Institute.Steve Gabriel, Agroforestry Extension Specialist, Cornell Small Farms Program sfg53@cornell.edu

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.

OWEGO FAITH, FARMING, & FOOD FORUM
with Dr. Hue & Suzanne Karraman & Dr. Roger DeHaan

COME & Learn NEW ways to Restore, Revive and Renew the Land & Your Body!

NOVEMBER 9 & 10, 2018

Location: Cafetorium
1277 Taylor Rd. Owego, NY 13827

**Friday (11/9/18) & Sat. (11/10/18) 7-9 PM Cost: $5 per night
2 Evening Sessions: "Faith, Food & Fitness" -Registration open at 6:30PM
*Saturday SESSION (11/10/18) : "Faith, Farming & the Future"
10 to 4 PM) (Registration open at 9:30 AM). A Healthy Lunch 12-1 PM.
Cost: $20 for day session with lunch.
Preregister by 11/5/18 to Marvin Moyer at (607)687-4053
Email: twinbrookfarm@binghamtonwireless.com

Main Speakers: Dr.Roger DeHaan-a Holistic Vet from North Carolina who practices alternative ways to help animals & people. Has lived in rainforest of Columbia for 12 years. Author of 3 books: www.aholisticvet.com

Dr. Hue Karreman: A vet from North Carolina with 30 years of practical experience working with dairy cows & giving presentations on organic livestock health care to farmers. An author of 3 books and barn guides on treating cows naturally and traveled the world sharing his knowledge.
Mrs. Suzanne Nelson Karreman has a vision for back to the land with regenerative farming. She is co-owner with her husband of Reverence Farm and Cafe with 90% of the food locally grown on their farm. www.reverencecafe.com.
Also: Nutrition & Fitness Specialist: Mrs. Nicole Kobziewicz from IPT Nutrition & Fitness: and Health & Wellness with Stuart & Nikki Howard (RN & CAHP) www.chaseafterhealth.com

Spotted Lanternfly Quarantine

NYS Department of Ag and Markets has announced a quarantine on materials moving into NYS from areas with spotted lanternfly – which currently includes Delaware, New Jersey, Pennsylvania, and Virginia.

Regulated materials

- Any living life stage of the SLF.
- Brush, debris, bark, or yard waste.
- Landscaping, remodeling, or construction waste.
- Logs, stumps, or any tree parts.
- Firewood of any species.
- Packing materials, such as wood crates or boxes.
- All plants and plant parts, including but not limited to nursery stock, green lumber, fruit and produce and other material living, dead, cut, fallen (including stumps), roots, branches, mulch, and composted and uncomposted chips.
- Outdoor household articles, including, but not limited to, recreational vehicles, lawn tractors and mowers, mower decks, grills, grill and furniture covers, tarps, mobile homes, tile, stone, deck boards, mobile fire pits, and any equipment associated with these items, and trucks or vehicles not stored indoors.

Any other article, commodity, item, or product that has or that is reasonably believed to be infested with or harboring SLF.

In order to bring any of the regulated materials into NYS, a certificate of inspection is required. These certificates are provided by the seller.

Information on permits from PA is at: https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/Entomology/spotted_lanternfly/quarantine/Pages/Do-I-Need-a-Permit.aspx

Ag and Markets is working with the other states on permit requirements.

Are you a new farmer seeking grants? NYS has a new grant program for you. See details at: https://esd.ny.gov/new-farmers-grant-fund-program