



Wildlife management options fall into 7 categories. Each location, crop and situation will

be different so don't rely on just one tactic.

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Our 2016 student research interns were a great success. We're looking for 2 students to assist

our team in 2017 with fresh market scouting. Know anyone?

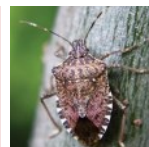
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Late season watermelons and flavorful squash were trialed in 2016 by our team. Read how

they measured up on size, number, appearance, and flavor.

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The NE IPM Center newsletter INSIGHTS provides updates on brown

bugs and spotted wing drosophila pertinent to fruit and veg growers.

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# VEGE<sub>Edge</sub>

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

● Volume 13 | ● Issue 3 | ● March 1, 2017

 **Cornell University**  
Cooperative Extension  
Cornell Vegetable Program

*Photo: Judson Reid*

## Are You Thinking About Wildlife Management as Plans Come Together for the 2017 Season?

*Darcy Telenko, CCE Cornell Vegetable Program*

Wildlife damage continues to plague vegetable growers across the region. The extremely dry season seemed to encourage more damage by our standard wildlife pests and others that we don't consider big problems. Dr. Catherine Lindell, Michigan State University, recently spoke at the Empire State Producers Expo in the Wildlife Management Session and she summarized her research by stating, "Each farm is unique and should be assessed for risk factors for bird damage, with an aim to decrease resources and manage the detrimental birds and increase resources for beneficial predators." Her research has found that lasers work in particular situations such as for Canadian geese in low-light situations, but will not likely deter if the



*Photo: Darcy Telenko, CCE Cornell Vegetable Program*

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**VegEdge** newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 13 counties in Western New York.

The newsletter is a service to our enrollees and is intended for educational purposes, strengthening the relationship between our enrollees, the Cornell Vegetable Program team, and Cornell University.

We're interested in your comments. Contact us at:  
CCE Cornell Vegetable Program  
480 North Main Street, Canandaigua, NY 14224  
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Information provided is general and educational in nature. Employees and staff of the Cornell Vegetable Program, Cornell Cooperative Extension, and Cornell University do not endorse or recommend any specific product or service.

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are possible. Some materials may no longer be available and some uses may no longer be legal. All pesticides distributed, sold or applied in NYS must be registered with the NYS Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide usage in NYS should be directed to the appropriate Cornell Cooperative Extension (CCE) specialist or your regional DEC office.

CCE and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products or companies is made or implied. **READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**

Help us serve you better by telling us what you think. Email us at [cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu) or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.



**Cornell University**  
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Cornell Vegetable Program

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*The next issue of VegEdge will be April 1, 2017.*



CVP's 2016 interns win 1st prize at poster competition at iPIPE IPMX3. Congratulations, Jodi and Gretchen!



bird pest is feeding in fruits during the day. She recommends the use of multiple scare deterrents, that are deployed early in the growing season, and moved frequently.

Wildlife Management methods fall into seven general categories:

- Habitat modification
- Exclusion
- Frightening devices
- Repellents
- Toxicants
- Shooting
- Trapping
- Other methods

**Habit Modification:** All animals need water, food and shelter – eliminate any of these and animals cannot survive. Habit modification addresses all of these life requisites and can include modifications such as cutting back bushes and trees to reduce cover, remove vegetation near building foundations, eliminate brush, woodpiles and junk, or mow tall grass to reduced presence of voles versus let grass grow to discourage geese. Picking a tactic will depend on the species that you are trying to manage.

**Exclusion:** Exclusion is the use of barriers such as nets, cylinders, fences. These can be high levels of protection over the short- and long-term but generally costlier when large areas need protection.

**Frightening Devices:** Frightening devices scare wildlife from a location through non-chemical means.

- Visual - plastic owls, scary-eye balloons, Mylar® tape, scarecrows, strobe lights
- Audio – propane cannons and distress calls
- Audio-visual – fireworks- based noisemakers
- Biological – guard animals (dogs), hawks, falcons

Wildlife often quickly habituate to frightening devices, except, perhaps biological.

**Repellents:** Chemicals that deter animal activity through pain, fear, touch, and aversive conditioning. Most states require a pesticide applicator license to use chemical repellents.

**Toxicants:** Chemical compounds that are used to kill problem animals such as mice, rats, pigeons, starlings and house sparrows. Care must be taken to minimize risk to non-target animals such as other wildlife, livestock, pets and people. Toxicants should be integrated with other wildlife methods to increase effectiveness.

**Shooting:** Shooting is appropriate for medium to large mammals, birds, reptiles, but requires training and skill. It is the most viable and cost-effective way to deal with wildlife conflict. Safety concerns and legal restrictions must be considered and local, state and federal regulations and ordinances must be followed. For example, in NY it is illegal to discharge a bow or firearm within 500 feet of a building without landowner permission. Some other species specific regulations of local interest include:

#### **Black Birds: Environmental Conservation law § 11-0523 – 3**

“Red-winged blackbirds, common grackles and cowbirds destroying any crop may be killed during the months of June, July, August, September and October by the owner of the crop or property on which it is growing or by any person in his employ.”

#### **Crows: Environmental Conservation law § 11-0523 – 1**

“Owners and leasees and members of their immediate families actually occupying or cultivating lands, and persons authorized in writing and actually employed by them in cultivating such lands, may take (a) unprotected wildlife other than birds and (b) starlings, common crows and, subject to section 11-0513, pigeons, when such wildlife is injuring their property or has become a nuisance thereon.”



Crow	
Regulations	Sept. 1 - Mar. 31
Bag Limit	None
Shooting Hours	Sunrise to Sunset
Non-Toxic Shot	NOT Required
HIP Registration	NOT Required
Other	Hunting on Fri., Sat., Sun. & Mon. ONLY; Fed Migratory Bird Stamp NOT Required; Last year's license needed when hunting prior to Oct. 1; Electronically amplified bird calls or sounds permitted

**Trapping:** Trapping is the most common tools used to manage wildlife. Trapping includes cage or box traps, mouse and rat snap traps. Lures and baits can help bring target animal to trap – lures are concentrated odors that may be detected from long distances.

#### **Others:**

Biological control – introduction of a disease or predator to manage a target population

Fertility control – most are still in experimental phase. Ferel pigeon product that may stop them from laying fertilized eggs.

We have been evaluating bird deterrents in sweet corn the last couple of years. This includes the chemical Avian Control (methyl anthranilate), an air-dancer, detasseling, and scare eye balloons.

In 2015, we evaluated on four farms which had 2- 30% damage in the untreated plots. Average harvestable ears were increased 4.2% with two applications of Avian Control starting at 50% brown silk, the air-dancer worked on a small scale with a 9% increased yield compared to untreated plots. Success was highly dependent on application timing, placement, and crop maturity.

In 2016, research trials were set-up on six farms. First bird migration was noted on June 30 and trials were initiated there after based on crop maturity and bird movement on that specific farm. Trials ran from July 7 until the end of August. Four farms compared the various tactics – chemical, air-dancer, balloons and detassel. In addition, Avian Control timing was evaluated in three locations; unfortunately no damage was recorded at two of the three sites and a third site had 6% damage across all treatments. Bird migration into non-research sites caused 10 to 90% damage on cooperating farms. Preliminary data review at one location found 14% damage in untreated, 11% in Avian control applied 2x at 7 day intervals starting 2-weeks prior to harvest, 5% in scare-eye balloon, 2% in detasseled, 0% in air-dancer. At a second location all treatments had little to no damage as the birds seemed to avoid the entire field after treatments placed. So again success was highly dependent on application timing, placement, and crop maturity. Growers have implemented a few techniques. One stated that he utilized the chemical treatment in his early corn near a location with historical damage and saw good results.

#### Our take away from the last two years.

- ✓ It's important to implement tactics before birds learn to feed.
- ✓ There is a need to disrupt their nesting sites and protect areas most susceptible to damage.
- ✓ For success of chemical deterrent – make application early to areas susceptible to damage – start 50% brown tassel – two applications at highest labelled rate.
- ✓ There's no silver bullet – each location, crop and situation will be different, so don't rely just on one tactic.

We aim to continue to refine BMP's for wildlife management – best timing and number of applications for optimum deterrence, determine best location for air-dancer – middle of field vs. edges where wildlife movement in may occur, continue to explore detasseling treatment as possible option, and we will be on the lookout for other options. ●

## Looking for a Farm Loan?

### FSA helps farmers and ranchers get started and keeps them going.

The Farm Service Agency (FSA) offers farm loans to farmers and ranchers who have experience and want to own or operate their own farm or ranch, but are unable to get financing from a traditional lender.

FSA provides financial assistance and business planning to help ensure the future well-being of American agriculture.

For more information, visit [www.fsa.usda.gov](http://www.fsa.usda.gov) or contact Karen Rugenstein, Farm Loan Manager at:

USDA – Farm Service Agency  
3037 County Road 10  
Canandaigua, NY 14424  
(585) 394-0525 ext.2



USDA is an equal opportunity provider, employer and lender. ●



### STUDENT RESEARCH INTERNSHIPS with the CVP

The Cornell Vegetable Program is looking to hire two student research interns this summer to assist in scouting fresh market vegetables in WNY. The internship will start in May, working alongside Darcy Telenko, as part of the iPIPE CAP (Integrated Pest Information Platform for Extension and Education, Cooperative Agricultural Project) internship program. iPIPE is committed to investing in the coaching and development of future agricultural scientists/extension educators through a limited term internship experience in an applied environment. The purpose of the program is to learn how to scout for pests in the field and contribute observations to the iPIPE platform. These positions are 5-month appointments (39 hours/week) and will be located in the CCE Erie County office (East Aurora, NY).

More information and application instructions for these positions are posted on our website at <http://cvp.cce.cornell.edu> under Announcements on the home page.

# More on Specialty Vegetable Trials: Late Season Watermelons and Flavorful Squash

Robert Hadad, CCE Cornell Vegetable Program

This article is the second part of the specialty crop evaluation trial carried out during the summer 2016. [2016 Specialty Pepper Trial Results was the cover article of our February 1, 2017 issue of VegEdge. ed. A. Parr, CVP.] One of the goals of this trial was to evaluate the feasibility of growing late season watermelon for something a bit different for the fresh market. The concept is to not only harvest melons later but to also have these varieties have longer storage shelf life.

## Late Season Watermelon Trial

The search for these types of watermelons led to looking at heritage varieties from the Southwest US and the highlands of western Mexico. Traditionally, watermelons were grown and the fruit matured later in the season than commercial varieties. These were stored in cool dry buildings and caves. Rinds were solid and thick. Average fruit size generally in the 8lb range with many fruit per vine. For our trial we evaluated for fruit number, size, initial flavor, storability, and flavor after storage (storage+flavor).

In our trial, 8 varieties were grown. Seven of the varieties came from the heritage group mentioned above. Another variety, Schochler, was added from the Seed Savers Exchange collection. The description of the variety mentions its very thick rind and came from the Dakotas/Minnesota area.

### Schochler



**Schochler** is large oblong green striped fruit on heavy growing vines. The number of fruit wasn't heavy though this variety ended up at the end of our field where little irrigation was available till the August rains came on. The heaviest fruit was 25lbs with others in the 10-16lb range. The rinds were very thick, up to 2" towards the ends of the melon and 1.5" through the middle.

The melons were harvested between 9/14 – 9/30. The melons were put into storage (55F at 85% humidity). They were taken out on October 15 and October 30 then on November 10. The quality remained good with sweet flavored flesh though it had a lot of seeds.

So what good was it? Actually, the pickle market is becoming a big deal for farmers markets and restaurants. The thick rind of Schochler made fabulous watermelon rind pickles (see photo). The 25lb melon actually made 20 pints.



### Tohono O'odham (below) and Hopi Yellow



For the other watermelon varieties, there were several that stood out for flavor and storage+flavor. Two yellow fleshed melons stood out: **Tohono O'odham** and **Hopi Yellow**. Both were dark green skin with striping and round shaped. Seeds were moderate in number in a circular swath midway through the fruit. Hopi Yellow had great flavor and Tohono was pretty close. Most of the fruit were harvested in late September and stored into early November. Both retained good flavor coming out of storage. The average weights for the Hopi and Tohono were 12lbs and 8lbs respectively. Both average 4 fruit per vine.

### Santo Domingo Winter



The red-fleshed variety, **Santo Domingo Winter** had the fewest seeds of all the melons trialed. Flavor was sweet and the texture remained crisp coming out of storage. The average weight for Santo Domingo was 6.25lbs with an average of 4.5 fruit per vine. The variety had varying sizes of fruit across the trial from small to large (3.5lbs – 12lbs).



### Navajo Winter



The red-fleshed variety **Navajo Winter** has a pale greenish to yellow rind. The flesh was pinkish red and very tasty. The average weight for Navajo Winter was 6.8lbs with an average of 4.5 fruit per vine. Like Santo Domingo Winter, Navajo Winter had varying sizes of fruit across the trial (see photo) from small to large (3.5lbs – 12lbs).

A farmer-cooperator brought a selection of melons to a winter farmers market for three Sundays before Thanksgiving. The novelty of watermelons gained a lot of attention and he sold 7-9 each week. Customers were very satisfied with the quality and flavor for that time of year. Prices paid varied on size ranging from \$3-\$5 each. We really weren't sure what the limit might be for the melons so we set prices modestly.

Storage of the melons did not last as long as it did in previous years. Part of the problem was due to weather. It was very dry most of the season then late rains kick started the vines and more fruit production. The fruit had absorbed more water than they may have in other years and this could have contributed to the shorter shelf life.

### Pie Pumpkin Flavor Trial

The connotation of pumpkin pie and pie pumpkins is a bit fuzzy. For generations, a pie pumpkin was any pumpkin too small to sell as a jack-o-lantern type. The smaller ones were marketed as suitable for pies. The processed "pie pumpkin" sold in cans in the grocery stores generally were butternut squash because the flavor was better. Truth in advertising pretty much forced the industry to start using real pumpkin in the last dozen or so years.

Our trial wanted to see if any pie pumpkin varieties had good flavor. We evaluated on size of fruit, number, appearance, and flavor. Our standard for comparison was New England Pie. This was a consistent producer in our trial with an average of 3.3 fruit per vine and 3.4lbs per fruit. The competition we put up against this classic variety were heirloom type pumpkins. They were Winter Luxury, Long Pie, Amish Pie, and Quaker Pie.

### Winter Luxury



**Winter Luxury** looked similar to NE Pie but with small warts. Average weight was 6.4lbs with 5.75 fruit per vine. Flavor was dry and flaky with similar flavor to NE Pie but sweeter.

### Long Pie



**Long Pie** starts off looking like a large zucchini that eventually turns orange. Fruit averaged 3.5lbs and 3.75 fruit per vine. Surprisingly light weight for the size with dry flaky texture and somewhat sweeter flavor than Winter Luxury.

**Amish Pie** proved to be a large gourd type variety. One fruit weighed over 40lbs while the remaining ones averaged 15lbs. The vines were huge but overall not very productive, the texture of the fruit was very moist, and the flavor bland.

continued on next page

### Schochler



**Quaker Pie** was a small lightly orangey-tan to off-white. The fruit were small averaging 2.85lbs but highly productive at 6.2 fruit per vine. The texture of the fruit was not as dry as NE Pie but not very wet either. The flavor was very good, sweet with nutty overtones. Overall, this variety was not the most striking in appearance but it more than made up with taste. The downside is that the flesh color was not a bright orange like the other pumpkins. It was more of a lighter orange-tan.

### Winter Squash Flavor Trial

While we were trialing pie pumpkins, we looked at some winter squash varieties to evaluate their flavor as well. The winter squash trial focused on several heirlooms and one new variety. We evaluated, like for the pumpkins, on size of fruit, number, appearance, and flavor. The new variety was a new mini-butternut from Pan-American Seed Co. It was unnamed at the time of the trial. The size was generally a little bigger than Honeynut. The weight of the Pan Am one was 1.3lbs with 11 fruit per vine. The flavor was decent, like traditional butternut.

In comparison, two varieties were also similar to the butternut type. One was Pennsylvania Crookneck and the other was an old French variety, Sucrine de Berry.

### Pennsylvania Crookneck



The **Pennsylvania Crookneck** produced very well. An average of 6 squash per vine weighing in around 4.85lbs. This variety looked like a crooked butternut, tan skin with a long and often thick neck. This trait made it easy to separate from the seed cavity when cooked. The texture was not as dry as Winter Luxury pumpkin but slightly moist. The flavor was very good.

### Sucrine de Berry



**Sucrine de Berry** was a strong producer of blocky-looking butternut type. The skin was darker with slightly orangey overtones and sometimes a blush of whitish bloom. The fruit average 12lbs with 4.8 per vine. The vines really stood up to PM. The texture of the orangey – red flesh was moist not soupy and more flaky than butternut. The flavor was stronger than butternut and sweet

### Tennessee Sweet Potato Squash



The biggest surprise of the trial was a rambling vined **Tennessee Sweet Potato** squash. This variety did well in the drought and started to produce fruit long before any of the other squash and pumpkins. The fruit were bright white with a little green striping here and there. Thick stem handles securely fastened the fruit to the plants. The flesh was a softer orange than butternut in color. This variety continued to produce latest into the fall as well. Fruit number averaged 5.5 per plant with weights of 8lbs.

### Storage

We did keep track of how well the squash and pumpkins kept in storage. Overall, it was a bad year for storage of squash. Late rains kicked up black rot in our field and the varieties in that part of the field suffered worse. The pumpkins and squash were kept at 50-60F. The New England Pie, Winter Luxury, and Quaker Pie started to lose storage life in late December with 30% gone by Christmas. By the end of January another 30% was lost and by the end of February only 5% survived.

Long pie, survived longer into the winter with 50% still available at the end of February. Sucrine de Berry, Pennsylvania Crookneck, and Pan Am mini butternut had 10% lost by Christmas. The mini butternut was 50% gone by the end of January and all gone by the end of February. Surcine de Berry and Pennsylvania Crookneck still had 25% left by the end of February.

Tennessee Sweet Potato was like a rock. It didn't have any losses until the end of January; only 25% by the end of February. ●

## UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)*

### 2017 NYS Dry Bean Meeting

March 6, 2017 | 9:30 AM - 2:30 PM

First United Methodist Church, 8221 Lewiston Rd (Rt 63), Batavia, NY 14020



Join us for research and production updates on dry bean varieties and bean breeding, weed management, Western bean cutworm, and white mold disease. There will also be an update on food safety practices and documentation required by buyers. We will also review research priorities and gather suggestions for future educational programs. DEC and CCA credits have been applied for. *Sponsored by BASF, Bayer, Genesee Valley Bean, and New York Bean LLC.*

Cost: \$25 CVP enrollees; \$35 all others, includes lunch with tasty dry bean dishes from the New York Coalition for Healthy School Food. You must **register by March 1** to guarantee lunch. Agenda and registration available at <http://cvp.cce.cornell.edu/event.php?id=665> or contact Julie Kikkert at 585-394-3977 x404, [jrk2@cornell.edu](mailto:jrk2@cornell.edu).

### 2017 WNY Fresh Market Winter Vegetable Meetings

Eastern Region | March 7, 2017 | 8:30 AM - 3:30 PM

CCE Wayne County, 1581 NY-88, Newark, NY 14513



Regional Fresh Market Winter Vegetable Meetings will be hosted by the Cornell Vegetable Program to discuss results from 2016 research trials and present information on pest management. Program topics will include an update on wildlife management, high tunnel nutrient management update, vegetable disease update including the new iPIPE Program in vegetables, new Climate Smart Farming Tools, cover crops and soil health, an update on Food Safety and Modernization Act and what you need to do for your farm, and other regional research and program updates. DEC credits will be available.

\$20 CVP enrollees; \$25 all others. More information and online registration available at <http://cvp.cce.cornell.edu/events.php> or call Darcy Telenko at 716-652-5400 x178.

### Onion School and Advisory Meetings

Elba Muck Region | March 8, 2017 | 9:30 AM - 4:00 PM

CCE Orleans County, 12690 St Rt 31, Albion, NY 14411



Oswego Region | March 16, 2017 | 10:00 AM - 4:00 PM

Vona's Restaurant, 9 Willow St, Oswego, NY 13126

A regional meeting for muck onion growers on the latest research results generated from our 2016 research trials in weed management, bacterial diseases, onion insect management, and onion leaf disease management. We will also be looking for guidance from regional growers on the direction of onion research and programming in New York. DEC recertification credits and CCA credits will be available. Meeting agendas available at <http://cvp.cce.cornell.edu/events.php>

FREE! For more information and to RSVP, contact Christy Hoepting at 585-721-6953 or [cah59@cornell.edu](mailto:cah59@cornell.edu).

### Webinar Series on Reduced Tillage in Organic Vegetables

March 9, 2017 | 3:00 - 5:00 PM EST | Reduced Tillage on Permanent Beds

March 16, 2017 | 3:00 - 5:00 PM EST | Strip Tillage Tools and Practices

March 23, 2017 | 3:00 - 5:00 PM EST | Cultivation for Reduced Tillage Systems



Join the Cornell Small Farms Program as we team up with Michigan State University and the University of Maine to offer **3 upcoming webinars** and share the latest research on reduced tillage for organic vegetable production. Learn about practices that fit your operation, from permanent beds, tarps, and mulches, to cover cropping, strip tillage, and cultivation tools. Participate in any or all of these FREE webinars:

**Reduced Tillage on Permanent Beds (March 9)** – Permanent bed systems can help small farms improve soils and reduce tillage for a diversity of crops. Learn how farmers are adopting these systems and hear research results on how tillage, mulching and tarping practices can impact your weed control, labor use, and crop productivity. *Ryan Maher and Brian Caldwell - Cornell, Mark Hutton - University of ME*

**Strip Tillage Tools and Practices (March 16)** – Adapting strip tillage for organic production requires careful crop planning. Learn the tools and equipment and what research is showing about integrating cover crops, managing residue, attracting beneficial insects, and controlling diseases and weeds. *Anu Rangarajan and Meg McGrath - Cornell University, Dan Brainard and Zsafia Szendrei - Michigan State University*

**Cultivation for Reduced Tillage Systems (March 23)** – Cultivation of the in-row zone is challenging, especially in reduced tillage systems. Learn about innovative in-row cultivation techniques for managing weeds in reduced tillage crops. *Dan Brainard and Sam Hitchcock - Michigan State University, Eric Gallandt and Bryan Brown - University of Maine*

Register at <http://tinyurl.com/msuwebinars>. Registration questions? Contact Vicki Morrone, Organic Farming Specialist, at [sorrone@msu.edu](mailto:sorrone@msu.edu). Questions about the Cornell Reduced Tillage Project? Contact Ryan Maher, Cornell Small Farms Program, at [mmm325@cornell.edu](mailto:mmm325@cornell.edu).



## UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)*

### Post-Harvest Wash/Pack Shed Operation Training

March 21, 2017 | 9:00 AM - 12:00 Noon

NYS Agricultural Experiment Station, Raw Products Building, 4920 Collier Dr, Geneva, NY 14456



CCE Steuben County, CCE Ontario County, and the Cornell Vegetable Program present a farm food safety training for post-harvest wash/pack shed operation. This half-day training will teach growers how to incorporate food safety principles into everyday practices. We will focus on topic pack shed design and set-up, reducing cross-contamination risk, demystifying sanitizer usage, clean up, and improving post-harvest handling.

Cost: \$10. Call Robert Hadad at 585-739-4065 to register and pay at the door with cash or check.

For more information, contact Robert Hadad at 585-739-4065 or [rgh26@cornell.edu](mailto:rgh26@cornell.edu), or Stephanie Mehlenbacher at 607-664-2300, or Marie Anselm at 585-394-3977 x402. A map of the building location can be found at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)

### WNY Garlic School

March 22, 2017 | 10:30 AM - 4:00 PM

Irondequoit Public Library, 1290 Titus Ave, Rochester, NY 14617



Topics for this year's garlic school will focus on emerging and established diseases and pests, including white rot, eriophyid mites, fusarium, and the insect pests moving towards the region from the north and the south – leek moth and allium leaf miner. Garlic testing and a seed certification update will be presented as well. There will be plenty of discussion between growers and our presenters.

Cost: \$20 CVP enrollees; \$25 all others. [Register online](http://cvp.cce.cornell.edu/events.php) at <http://cvp.cce.cornell.edu/events.php>. For more info, contact Robert Hadad at 585-739-4065 or [rgh26@cornell.edu](mailto:rgh26@cornell.edu).

*Hosted by the Cornell Vegetable Program, ENY Commercial Horticulture Program, and CCE Monroe County.*

### In-depth Workshop on Management of Weeds in Fruit and Vegetables

March 23, 2017 | 8:00 AM - 3:30 PM

CCE Orleans County, 12690 Rt 31, Albion, NY 14411



Vegetable, tree fruit, and berry weed management strategies will be highlighted at this in-depth workshop presented by the Cornell Vegetable Program and the Lake Ontario Fruit Team. The day will begin with information on how to identify weeds and basic weed biology. Management strategies for different weed types (perennials, grasses, annuals) will be discussed as well as information about using herbicides safely and effectively for weed control. Sprayer technology options will be covered. There will be an open discussion at the end of the program for growers to ask questions. DEC recertification credits will be available. The full agenda and registration form are available at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu).

COST: \$75 per person. You may purchase a copy of the *Weeds of the Northeast Handbook* for \$25. Pre-register by March 17 for all training materials, or March 20 if you do not need the handbook. Registration for this event is being taken by the CCE Lake Ontario Fruit Team. [Pay online](#) or contact Kim Hazel at 585-798-4265 to have a registration form mailed to you.

### Getting Started in Agritourism – Creating a Destination Farm

March 30, 2017 | 8:30 AM - 3:00 PM

Wegman Lodge, Zoo Rd, Seneca Park, Rochester, NY 14617

Did you know that Agritourism is one of the fastest growing sector of tourism industry? It is a trend that is not likely to go away soon.

CCE Monroe and CCE Tompkins are inviting all farmers, food entrepreneurs, horse-farm owners, and other agribusiness operators that want to build their skills and grow revenues by transitioning their purely agriculturally-based operations to a "destination" farm for the public to enjoy. This workshop is a part of an educational series designed to help farmers develop necessary skills and materials to scale their businesses, build sales, keep visitors safe as well as access capital resources.

Key aspects of agritourism will be featured, including event planning, attracting the public, strategic marketing thinking, use of social media, new dimensions and directions, as well as insurance talk. A lineup of professionals will share their expertise on creating a connection between local farms and the community at-large: Bill Wickham of Wickham Farms, Laura Faulk of Experience the Finger Lakes Tours, Amy Machamer of Hurd Orchards Farm & Market, Joe Hurley of Kettle Ridge Farm and members of the Rochester Convention & Visitor Bureau director, Greg LaDuca and Cailin Lawrence. The workshop will be a great opportunity for participants to meet, network and talk to the industry specialists one-on-one!

Laura Faulk, founder and owner of the Experience the Finger Lakes Tours, will be doing a book signing for her book, the '**Culinary History of the Finger Lakes**'.

COST: \$30 includes 'Getting Started in Agritourism' reference manual. Register online at [https://reg.cce.cornell.edu/agritourism\\_226](https://reg.cce.cornell.edu/agritourism_226). More information will be posted at <http://monroe.cce.cornell.edu/events> or contact Jarmila Haseler, [jh954@cornell.edu](mailto:jh954@cornell.edu) or 585-753-2565.

## UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)*

### 2017 Special Permit Training

April 4, 2017 | Time TBD

CCE Wayne County, 1581 St Rt 88, Newark, NY 14513



April 5, 2017 | Time TBD

CCE Orleans County, 12690 Rt 31, Albion, NY 14411

More details will be available soon. Questions – contact Christy Hoepting at [cah59@cornell.edu](mailto:cah59@cornell.edu) or 585-798-4265.

### Produce Safety Alliance Grower Training Course *plus* Optional Food Safety Plan Writing Workshop



April 5-6, 2017 | April 5: 8:00AM - 5:00 PM; April 6: TBA

Genesee County Fire Training Center, 7690 State St Rd, Batavia, NY 14020

Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety should attend this food safety training. Individuals who participate in this course are expected to gain a basic understanding of:

- Microorganisms relevant to produce safety and where they may be found on the farm
- How to identify microbial risks, practices that reduce risks, and how to begin implementing produce safety practices on the farm
- Parts of a farm food safety plan and how to begin writing one
- Requirements in the FSMA Produce Safety Rule and how to meet them

In addition, the **PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement** outlined in section 112.22 (c) that requires *'At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.'*

#### **What to Expect at the PSA Grower Training Course (Wednesday, April 5):**

The trainers will spend approximately seven hours of instruction time covering content contained in these seven modules:

- Introduction to Produce Safety
- Worker Health, Hygiene, and Training
- Soil Amendments
- Wildlife, Domesticated Animals, and Land Use
- Agricultural Water (Part I: Production Water; Part II: Postharvest Water)
- Postharvest Handling and Sanitation
- How to Develop a Farm Food Safety Plan

In addition to learning about produce safety best practices, key parts of the FSMA Produce Safety Rule requirements are outlined within each module. There will be time for questions and discussion, so participants should come prepared to share their experiences and produce safety questions.

After attending the entire course, participants will be eligible to receive a certificate from the Association of Food and Drug Officials (AFDO) that verifies they have completed the training course. To receive an AFDO certificate, a participant must be present for the entire training and submit the appropriate paperwork to their trainer at the end of the course.

#### **Optional Workshop on Farm Food Safety Plan Writing (Thursday, April 6):**

Although this is not a requirement of FSMA, it is for those being asked by their buyers to have a food safety plan and undergo a 3rd-party audit. Participation in the Day 2 session is limited to those who previously attended a 1 day FSMA or GAPs training.

For more info about this training, vegetable growers should contact [Robert Hadad](#), or fruit growers should contact [Craig Kahlke](#).

COST: \$125 per attendee includes lunch, refreshments, and training materials. [Register for this event](#) at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu) by April 3.

## Invasive Species Updates

Julie Kikkert, CCE Cornell Vegetable Program

The theme of the January edition of the Northeastern IPM Center newsletter *INSIGHTS* is invasive species. Updates on brown marmorated stink bug (BMSB) and spotted wing drosophila (SWD) are pertinent to local vegetable and fruit growers. The NE IPM Center has a dedicated website for BMSB called StopBMSB.org where the latest updates can be found. According to the article, one of the most popular pages is one about stink bug look-alikes. Check out the website to find out how to distinguish BMSB from brown and dusky stink bugs and the spined soldier bug, among others.

The NYS IPM Program received funding to establish a spotted wing drosophila (SWD) working group to coordinate and prioritize research and outreach efforts. Information about SWD, including fact sheets and updates for the Northeast and from national sources, visit <http://neipmc.org/go/kWby>



Brown marmorated stink bug.  
Photo source: iStock

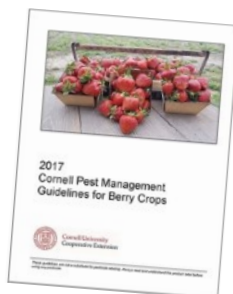
The NE IPM Center *INSIGHTS* newsletter can be read at <http://www.northeastipm.org/about-us/publications/ipm-insights/> ●

## Cornell Guidelines...More than Just Vegetables

The go-to publication for NYS growers, the Cornell Guidelines offer the latest information on topics such as pest management, crop production, and landscape plant maintenance. Each title in the series is updated by Cornell University researchers and Extension specialists and is designed as a practical guide for: agricultural and horticultural crop producers; turf and landscape managers; crop consultants and industry advisers; Extension educators; Master Gardeners; and pesticide dealers.

Available 2017 Guidelines include:

- **2017 Cornell Integrated Crop and Pest Management Guidelines for Commercial Vegetable Production**
- **2017 Cornell Guide for Integrated Field Crop Management**
- **2017 Cornell Pest Management Guidelines for Commercial Tree Fruit Production**
- **2017 New York and Pennsylvania Pest Management Guidelines for Grapes**
- **2017 Cornell Pest Management Guidelines for Berry Crops**
- **2017-18 Cornell Guide for the Integrated Management of Greenhouse Crops and Herbaceous Ornamentals**



Additional titles will be available by April 1.

Cornell Guidelines can be purchased through many local Cornell Cooperative Extension offices or from the Cornell Store at Cornell University. To order from the Cornell Store, call 844-688-7620 or order online at <http://store.cornell.edu/c-875-pmep-guidelines.aspx>. ●

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# VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

## VEGEdge

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VegEdge is the award-winning newsletter produced by the Cornell Vegetable Program in Western New York. It provides readers with information on upcoming meetings, pesticide updates, pest management strategies, cultural practices, marketing ideas and research results from Cornell and Cornell Cooperative Extension. VegEdge is produced every few weeks, with frequency increasing leading up to and during the growing season.

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