



New York Berry News

Volume 11, Number 5

May 25, 2012

Events Calendar

June 7-8, 2012. *River Hills Harvest Comprehensive Elderberry Workshop and Farm Tour*, Hartsburg, MO. More information: <http://elderberylife.com/workshops/> or phone: Rodger Lenhardt, 919-602-2082 or Terry Durham, 573-999-3034.

June 8, 2012. *WNY Small Fruit Growers Meeting: Opportunity to be a Part of Soil Management Research Project*. Clarence, NY. Details follow below.

June 12, 2012. *NYSAES Strawberry Field Day*. NYSAES, Geneva, NY. 2 – 5 PM. Details follow below.

August 14-15, 2012. SAVE THE DATE! *NASGA Summer Tour*, Halifax, Nova Scotia. Details forthcoming.

September 14, 2012. SAVE THE DATE! *Cornell Small Fruit Open House*, Cornell Orchard and Maple Avenue High Tunnels, 1-4 PM. More information forthcoming.



WNY Small Fruit Growers Meeting June 8th in Clarence, NY: Opportunity to be Part of Soil Management Research Project

1:30 pm to 3:30 pm

5685 Shimerville Road; Clarence Center, NY 14032

Do you make standardized fertilizer applications based on your crop's age but have been thinking of trying an analysis-based fertilization program? Are you interested in exploring the benefits that the adoption of soil health testing can provide?

Research demonstrates an analysis-based approach to berry crop nutrition provides increased yields along with better fruit quality and plant health. Use of soil health management practices (i.e. cover cropping) has been shown to reduce weed, nematode and soil-borne disease pressure, along with improving soil tilth, organic matter and nutrient content. This workshop will discuss how a whole farm approach to berry crop nutrient and soil management can help address rising input costs and concerns about environmental impacts of fertilizers.

Sharon Bachman, Community Educator for Agriculture, will be presenting information developed as part of a 2-year NE SARE Professional Development Project, led by Dr. Marvin Pritts, Small Fruit Horticulturalist and Berry Crop Nutrition Specialist. The goal of the Project is to provide in-depth berry crop nutrition and soil management training and resources for ag educators and the commercial berry growers they serve. Cathy Heidenreich will also be on hand June 8th to answer growers' questions.

In this, year two of Dr. Pritts' Project, in addition to grower trainings such as this one, **grower cooperators are being recruited to participate in one-on-one consultations on berry crop nutrition and soil health practices.** Educators trained by the Project will assist participating growers in adopting analysis-based berry crop nutrient and soil health management techniques and monitoring the success of these practices. You can find more information on the Project at

For Erie County small fruit growers who are interested in participating in the Project, but are unable to attend the session on June 8th, contact Sharon Bachman for more information on how you can be involved.

The session is free, but RSVPs are requested to Sharon Bachman at 716-652-5400x150 or sin2@cornell.edu by June 5th.

NYSAES STRAWBERRY FIELD DAY

June 12, 2012

Cornell University's New York State Agricultural Experiment Station is hosting a strawberry field day from 2 to 5 pm on Tuesday, June 12, 2012.

The field day will be held at the Darrow Farm at 3227 Gates Rd., which is approximately 3 miles west of the Experiment Station off County Rd. 4 (North St. in Geneva) and 1 mile south on Gates Rd.

Your host for this event will be Dr. Courtney Weber focusing on a plasticulture trial with over 20 varieties from the Northeast, California and Florida.

In addition, the newest strawberry varieties to be released from the Cornell University strawberry breeding program, Herriot and Purple Wonder, will be on display. Fruit from most varieties will be available for evaluation and tasting.

Additionally, Drs. Kerik Cox, and Greg Loeb and Extension Specialist Cathy Heidenreich will be on hand to present information and answer questions on production practices and pest management.



The program is free and open to the public but pre-registration is strongly encouraged to ensure adequate handouts and refreshments. Signs will be posted on the day of the event.

Please register by email, phone, or mail to:

Lou Ann Rago, Cornell University-NYSAES, Dept. of Horticultural Sciences, 630 W. North St., Geneva, NY 14456.

email: lar38@cornell.edu

phone: (315) 787-2394.

Questions may be directed to Dr. Courtney Weber at 315-787-2395 or caw34@cornell.edu.



Penn State Extension

Twilight Day-Neutral Strawberry Meeting

When: Thursday, July 12
5:30-8:30 p.m.

Where: Linvilla Orchards,
137 West Knowlton
Road, Media, PA

Cost: FREE, but please call Linvilla Orchards at 610-876-7116 before July 11 so that they can get a head count.

Linvilla Orchards was awarded a Pennsylvania Specialty Crops Grant to investigate the feasibility of commercial scale production of day-neutral, also known as everbearing strawberries. You are invited to see more than 4 acres of production, including 3 acres of the variety Seascape established in the spring of 2012. Harvest should be in full swing at the meeting date.

Norm Shultz, orchard manager, will discuss management practices he has used and his vision for day-neutral strawberry production in

Pennsylvania. Kathy Demchak, Penn State Extension small fruit specialist will be on hand to discuss her research experiences with strawberries. Pesticide credits will be provided.

The meeting will begin at 5:30 with light refreshments. We will head to the fields at 6:00. In addition to strawberries, Linvilla grows approximately 30 acres of apples, peaches, pears, blackberries and blueberries and market them at their farm market in Delaware County, southeastern Pennsylvania.

Don't miss this opportunity to get a first-hand look at a new strawberry production system as well as a premier retail marketing operation at Linvilla Orchards.

This publication is available in alternative media on request.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

PENNSTATE



Cooperative Extension
College of Agricultural Sciences

Cornell Releases Two New Raspberry Varieties - [Amanda Garris](#)

April 30, 2012. With its two newest raspberry releases, Big Red is going gold and crimson. Double Gold and Crimson Night offer small-scale growers and home gardeners showy, flavorful raspberries on vigorous, disease-resistant plants.

"Both varieties have attracted a lot of interest from small-scale growers because they are looking for varieties with intense flavor and a different look from the supermarket varieties," said Courtney Weber, Cornell small fruits breeder and associate professor of horticulture. "If consumers get a taste of these, they will buy them."

Double Gold produces a deeply blushed, golden champagne-colored fruit with a distinctive conical shape, earning the "double" in its name for its two harvests per season. The first year of planting, the initial crop is produced in the fall on the tips of that year's canes, and a second crop is produced farther down the same canes the following summer. According to Weber, none of the golden raspberries already on the market combine excellent flavor, peachy blush color, a conical shape and the ability to bear two crops per season.

"I have been told by sellers at farmers markets that having several colors on your display is a good way to draw in customers and distinguish you from other sellers," said Weber. "I'm hoping Double Gold will fit that niche."

In Weber's taste tests, Double Gold has been a favorite. The release is targeted to u-pick growers, farm stands and home gardeners because the fruit is too delicate for long-distance shipping. Although the fruit is tender, the plants that bear them are tough.

"Over eight years of testing, it has been consistently vigorous and disease-resistant," said Weber.

"Specifically, we have observed it to be resistant to Phytophthora root rot as well as most of the common leaf diseases."

Crimson Night caught Weber's eye among thousands of raspberry selections in summer 2003 for its heavy fall crop and dark, shiny fruit. Grown in a commercial high tunnel system that offers protection from the elements, it is vigorous and productive. Grown outdoors without protection, Crimson Night is more compact, making the dark purple canes a particularly attractive ornamental for container gardening or a backyard raspberry plot.

"The berries are medium large with excellent flavor," said Weber. "Although the color is considered too dark for wholesale markets, the shiny, conical fruit are very attractive in a container at a farm stand."

According to Jessica Lyga, plant varieties and germplasm licensing associate for the Cornell Center for Technology Enterprise and Commercialization, both varieties have been licensed to North American Plants, LLC., a propagator that sells to nurseries and growers across the United States. Small quantities will be available late this summer, and North American Plants expects to have enough plants to meet the anticipated demand of each variety by the spring of 2013. Plant patents will be filed later this year.

Double Gold and Crimson Night are the fourth and fifth new berry varieties introduced by Weber in the past year. Recent releases include Purple Wonder, the darkest strawberry variety available; the Herriot strawberry, a high-yielding midseason variety; and the Crimson Giant



Double Gold bears deeply blushed, golden champagne-colored fruit in two crops per season. *(Photo courtesy Courtney Weber)*



Crimson Night produces heavy crops of shiny, dark fruit. *(Photo courtesy Courtney Weber)*

raspberry, suitable for high tunnel cropping systems with a November harvest. Weber hopes to maintain a steady pace with selections this summer.

"For 2012 there will be approximately 20,000 raspberry seedlings under evaluation, and we will plant about 7,500 more," he said. "We'll also be adding 2,500 more strawberries to the 2,000 already under evaluation."

Interested growers can learn more about new Cornell berry varieties at a strawberry field day in mid-June and two raspberry open house events in July and September.

Amanda Garris a freelance writer in Geneva, N.Y. Article reprinted from Chronicle Online: <http://www.news.cornell.edu/>.

Do You Have Surplus Product?

Partnering with Your Local food Bank is a Hassle-Free Solution That Benefits You and Your Community.

Foodlink is the local food bank for all of **Allegany, Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates Counties**. In this service area we partner with 450 agencies that provide service to 150,000 individuals in need.

If you have a farm in one of these counties and have surplus harvested product, or productive fields that you may not harvest, there are three ways to partner with Foodlink.

- **Donation:** Foodlink has trucks in each of these counties at least once a week. We can pick up product and provide you with a receipt of your donation, which will allow you to receive a **tax deduction**.
- **Gleaning:** Foodlink can bring out a team of volunteers to glean unharvested product. **We accept all liability and will provide an insurance waiver** when we come out to glean.
- **Reimbursement for Harvesting:** On a per-case basis, Foodlink is interested in paying farmers for the cost of an extra harvest. We can work out a fair price for both parties and send our trucks to the farm to pay for and pick up the product.

For more information, please go to www.foodlinkny.org and contact: John Baldanza: jbaldanza@foodlinkny.org, 585-328-3380 x149 or Mitch Gruber: mgruber@foodlinkny.org, 585-328-3380 x113.

NYS NEWS

Governor Cuomo Announces Freshconnect Grants to Help Provide Low-Income & Underserved Communities with NY Farm Products

34 Projects Feature Creative, Local Solutions to Improve Access to Fresh, Healthy Food

May 3, 2012. Governor Andrew M. Cuomo today announced FreshConnect grants to 34 projects around the state that will increase access to New York farm products for residents in low-income and underserved areas.

"This is really a win-win situation for farmers and for families across the state as we try to provide more access and easier access to locally grown, fresh farm products," Governor Cuomo said. "These FreshConnect grants will support creative solutions to get New York farm products to underserved areas of the state, creating new economic opportunities for our farmers while, at the same time, providing healthy options for more New Yorkers."

Almost 1.5 million New Yorkers live in areas with limited supermarket access. Expanding access to fresh food in underserved communities has been shown to both improve nutrition and lower costs related to obesity and diet-related disease, while also fostering community and economic development. Governor Cuomo launched the FreshConnect program last year to create new farmers' markets and support existing markets that provided fresh produce to high-need areas. With this round of funding, the program will have helped a total of 48 projects throughout the state bring New York farm products to communities in need.

The Governor expanded the FreshConnect Program this year to support not only farmers' markets, but other creative solutions to improve access to fresh, locally produced food by low-income or underserved communities. As a result, the program received over 121 proposals and is providing funding to the top projects that exhibit local innovative solutions to connect communities in need with New York farm products. Examples of funded projects include:

- Farmers' markets and youth-operated farm stands that will be created or expanded to better serve low-income residents in food deserts
- Subsidized Community Supported Agriculture (CSA) shares or low-income CSA programs that will introduce over 100 new families to weekly deliveries of fresh fruits and vegetables
- The introduction of EBT (Electronic Benefits Transfer) services for the first time at 13 farmers' markets to allow these farmers markets to accept Food Stamps, along with plans to increase Food Stamp purchases through promotion and incentives

- Free transportation services to help increase traffic at existing markets and allow those with limited resources an opportunity to attend and shop at a farmers' market
- Improving distribution of locally grown, fresh food to food pantries and congregate feeding programs

Applicants received extra points in the competitive ranking process for including a food donation program in their proposed project. As a result, nearly all recipients of FreshConnect funding will be coordinating a local food donation program to connect food pantries or food banks with New York farm products, as part of their funded project. All FreshConnect projects will accept Food Stamps, if applicable, and are encouraged to accept Women, Infants, and Children (WIC) Fruit & Vegetable Checks, Farmers' Market Nutrition Program coupons, and Senior Farmers' Market Nutrition coupons, to ensure that all citizens have access to fresh fruits and vegetables, regardless of income.

The FreshConnect program will also support the continuation of its flagship market, the 125th Street FreshConnect Farmers' Market, located at the Adam Clayton Powell Jr. New York State Office Building in Central Harlem. Slated to open in mid-June and to be managed by the Harlem Memorial Community Development Corporation, the market will feature a wide assortment of New York farm products, as well as family activities and community outreach that will support the FreshConnect program's mission to increase access to fresh food in low-income and underserved neighborhoods.

The FreshConnect program will also again offer FreshConnect Checks, a nutrition incentive to encourage Food Stamp recipients to use their benefits at participating farmers' markets by providing \$2 rebate checks for every \$5 in Food Stamps spent at participating markets.

New York State Agriculture Commissioner Darrel J. Aubertine said, "Like the crops we harvest, the FreshConnect projects Governor Cuomo is awarding today are born from the ground up and are a true reflection of the need and interest at the local level to help better connect fresh and healthy food from New York farmers with those in rural and urban areas that lack access."

U.S. Senator Kirsten Gillibrand, a member of the Senate Committee on Agriculture, said, "This is great news for so many families across New York. Millions of New Yorkers do not have access to fresh, healthy food. This program will help ensure that more families are able to have access to fresh fruits and vegetables, which gives people the opportunity to live longer, healthier lives, saves billions in health care costs, and creates good-paying jobs right here at home."

U.S. Representative Charles B. Rangel said, "The projects promoted by the FreshConnect program represent one giant leap towards a healthier New York. I applaud Gov. Cuomo for continuing to find new and exciting ways to provide access to fresh food to underserved New Yorkers while giving a much needed boost to the State's agriculture. I am confident that the program will be a huge success and look forward to visiting the 125th Street FreshConnect Farmers' Market, located right by my district office."

U.S. Representative Nydia Velázquez said, "Making nutritious food available to underserved areas can help New Yorkers lead longer and healthier lives."

U.S. Representative Tim Bishop said, "These FreshConnect grants will help underserved communities on Long Island enjoy the many benefits of fresh produce and open up new markets for Suffolk County's farmers. Targeted grants to support existing Farmers' Markets and kick-start innovative programs will improve access to healthy fruits and vegetables throughout Long Island and all of New York."

U.S. Representative Chris Gibson said, "Family farms are essential to the fabric of our local Upstate New York communities. I firmly believe that our farmers are the hardest working, smartest farmers in the world. Their issue is profitability and this partnership will provide benefit to both local farms looking for new markets for their products and families looking to access more locally grown food. I am a strong proponent of 'buying local,' and applaud Governor Cuomo for this initiative to expand that philosophy across New York State. I look forward to advancing similar issues at a federal level in the upcoming Farm Bill."

State Senator Patty Ritchie, Chair of the Senate Agriculture Committee, said, "Farmers' markets across New York State are an important part of local economies, and Governor Cuomo's FreshConnect program has been a successful initiative in providing farmers with the help they need to sell their produce to more New Yorkers. The grants announced today will be a shot in the arm for local farms and agriculture communities across New York, while also ensuring that healthy food is made available to residents of our underserved communities. I commend the Governor for launching this initiative, and I look forward to working together in the future to continue to strengthen New York's vibrant farming community."

Assemblyman William Magee, Chair of the Assembly Agriculture Committee, said, "These grants will benefit New York's agriculture communities and residents, as farmers will be better able to market their produce and more New Yorkers will have access to fresh, healthy food. I thank Governor Cuomo for launching and supporting the FreshConnect program, and we will continue to work together to make New York's farm produce accessible to all New Yorkers."

John Evers, Executive Director of Food Bank Association of New York State, said, "The Food Banks are very excited about the Governor focusing on increasing access to fresh produce for those in need. There has never been a greater demand for fresh and healthy food. We thank Governor Cuomo for this exciting initiative and look forward to working with the recipients in their local communities."

Dean Norton, President of New York Farm Bureau, "Governor Cuomo's FreshConnect program represents an important investment in New York's agriculture industry. The projects announced today will help to better connect people living in underserved communities with our family farms and the fresh locally grown food that they produce every day. This represents a win-win for the citizens of New York State because it strengthens the state's agricultural business climate, while getting nutritious food to those who need it. I commend Governor Cuomo for his work on behalf of New York's farmers and look forward to continuing to work with him on this innovative program."

Diane Eggert, Executive Director of the Farmers Market Federation of New York, said, "Farmers markets are a proven system of increasing the availability of locally grown, fresh food in neighborhoods. Through the FreshConnect program, Governor Cuomo is taking this concept one step further by providing an incentive for communities to introduce new consumers to this type of direct marketing and to encourage the use of EBT at farmers markets that will result in greater sales for our farmers and will put more farm fresh fruits and vegetables on the plates of those in need."

The FreshConnect program is administered through a partnership between the New York State Department of Agriculture and Markets, Empire State Development, and the Office of Temporary and Disability Assistance.

2012 FreshConnect grant recipients include:

WESTERN NEW YORK:

Downtown Jamestown Development Corporation.(\$10,000) The Downtown Jamestown Farmers' Market will promote existing transit service to increase access to residents in food deserts. Advertising inside and outside city buses, a regular bus stop at the market and discounted fares for the market will be used to promote the service.

FINGER LAKES

Foodlink, Inc., Rochester (\$10,000) The Partners Thru Food program will collaborate with local growers and distributors to source fresh, seasonal produce for ten farm stands that will be run by different local agencies in food insecure neighborhoods in Rochester.

Foodlink, Inc., Rochester.(\$10,000) A project that will deliver fresh produce directly to densely populated, ethnically mixed food deserts in Rochester. Youth will be employed to transport food supplied by the food bank via bicycle, thus increasing accessibility and spurring entrepreneurial activity.

Rochester Roots, Inc., Rochester (\$10,000) The Healthy Market Basket CSA project will provide 60 low-income CSA shares at the Clara Barton School, one of the poorest school districts in the State.

SOUTHERN TIER

Chemung County Cornell Cooperative Extension, Elmira (\$6,731) CCE will extend EBT/Food Stamp services to all farmers' markets in Chemung County. Currently, only one of the five markets offers EBT in this rural county

Tioga County Cornell Cooperative Extension, Owego.(\$6,700) CCE will extend EBT/Food Stamp services to all registered farmers' markets in Tioga County, which include those markets in Waverly, Owego, Newark Valley and Spencer.

Tompkins County Cornell Cooperative Extension, Ithaca.(\$10,000) CCE will promote and expand EBT/Food Stamp use at rural farmers' markets in Caroline, Groton, Lansing, Newfield and Trumansburg. Outreach will be done at food pantries, where coupons for \$5 will be provided to use at local farmers' markets.

Tompkins County Cornell Cooperative Extension, Ithaca.(\$10,000) A low-income CSA share project that will grow from 100 to 130 shares, as well as introduce 10 winter CSA shares and four CSA ambassadors who will assist in outreach and recruitment. Each share is half-price and comes with educational resources and cooking workshops.

Village of Newark Valley.(\$994) The new Newark Valley Farmers Market will bring market opportunities for local farmers and encourage low-income families to shop for local produce. The market will also provide transportation for the elderly, handicapped and inbound residents of Berkshire and Richford.

MOHAWK VALLEY:

Central Adirondack Partnership for the 21st Century, Old Forge.(\$4,900) The Old Forge Farmers Market, in its fifth year, will expand its vendor base and community involvement by providing transportation for seniors and those with disabilities, promote the market with local church groups, and offer a farmers' market internship.

Village of Sharon Springs.(\$9,998) The Sharon Springs Farmers Market is a small market that was devastated by the 2011 floods soon after it opened, but strives to increase access to local food from beginning farmers in a low access area of Schoharie County. A 50% Food Stamp match program will be offered as an incentive.

NORTH COUNTRY:

Gardenshare, Inc., Canton. (\$9,500) A project that aims to double the amount of Food Stamp dollars spent at the Canton and Potsdam Farmers' Markets by providing a financial incentive of five EBT/Food Stamp tokens for every ten Food Stamp dollars spent and a \$20 incentive for Food Stamp customers who attend more than three markets.

CAPITAL REGION:

Capital District Coop, Menands. (\$10,000) Free transportation service will be provided on Saturday mornings for seniors and low-income families to bring them to the 75 year old farmers' market in Menands that is typically seen as out of way and held when there is a shortage of public transportation.

Cooperative Community Food Compact, Inc., Nassau. (\$10,000) The Nassau Compact is a food coop in rural Rensselaer County that offers free scholarships to low-income individuals and accepts Food Stamps. A unique way for local farmers to sell their products, which coop members order on-line and pick up at the weekly market at a local church.

Schenectady Greenmarket. (\$6,926) A new satellite market of the Schenectady Greenmarket will open in Bellevue as a result of a community survey calling for one. The market will take place at a church located in a food desert of the city and on the main route with ample parking.

MID-HUDSON:

City of Mount Vernon. (\$9,939) The City of Mt. Vernon Fresh Connect Market is entering its second year and will continue to focus on providing healthy, local produce to residents with fixed incomes and limited budgets at City Hall, which is centrally located and accessible by public transportation.

Northeast Community Council, Inc., Millerton. (\$8,705) Share the Bounty Farmers Market will be new in 2012 at the local public health clinic that will serve low-income residents in northeastern Dutchess County and offer nutrition education about fresh produce by a registered dietician once a month.

Port Jervis Community Development Agency. (\$6,962) The Port Jervis Sav-A-Lot grocery store will offer local farm products, as well as supply a mobile market to expand access to seniors and low-income residents. Cooking demonstrations will also be provided in-store and at senior centers.

Ulster County Cornell Cooperative Extension, Kingston. (\$10,000) CCE will secure locally grown healthy food and deliver to four area corner stores, where cooking demonstrations, recipe cards for seasonal produce and nutrition education will be shared.

Ulster County Cornell Cooperative Extension, Kingston. (\$10,000) A project to establish a mid-week satellite market in conjunction with the Kingston Farmers Market, which will be located in the heart of a food desert in mid-town Kingston and will serve lower-income and Spanish-speaking populations in the area

NEW YORK CITY:

EcoStation: NY Inc., Brooklyn. (\$10,000) A community outreach project in Bushwick, one of New York City's poorest neighborhoods, that will entail regular visits to WIC, senior and community centers, workshops centered around food and nutrition, as well as a new satellite market.

God's Battalion of Prayer Church, Brooklyn. (\$9,000) A project that will distribute New York produce on a bi-monthly basis to food pantries and congregate feeding programs using two churches as the "food hubs" and that will work with six to eight other churches in the neighborhood.

GrowNYC, New York. (\$9,330) The Cypress Hills Youthmarket is run by area youth in the Cypress Hills neighborhood of Central Brooklyn and provides job training and seasonal employment, as well as access to fresh farm products through direct wholesaling.

GrowNYC, New York. (\$10,000) A new youth-run farm stand, Roberto Clemente Plaza Youthmarket, located in a low-income, underserved area of the South Bronx will offer fresh and affordable farm products.

Harlem Memorial Community Development, New York. (\$15,000) The 125th Street FreshConnect Farmers' Market, located at the Adam Clayton Powell Jr. New York State Office Building, will offer unique farm products, activities, and community outreach to increase fresh food access in Central Harlem.

Inwood Church, New York. (\$10,000) A program that entails a network of urban farm stands operated by youth and supplied by New York farmers. The Go Green Youth Farm will expand its Dyckman Street operation to a second day to better serve the growing demand from local, low-income residents.

Inwood Church, New York. (\$10,000) A new urban farm stand will be created next to Van Cortlandt Park in the Bronx where youth will provide local produce, weekly cooking classes and free comprehensive health examinations.

New York City Coalition Against Hunger, New York.(\$10,000) A project to expand and institutionalize six existing CSA projects and create a new CSA in a low-income food desert on Staten Island. The CSA model is unique in that low-income families are eligible to use Food Stamps and scholarships to offset costs.

United Community Centers Inc., Brooklyn.(\$10,000) A project to reduce barriers and increase access to locally grown food by enhancing programming for children at the East New York Farms market. Activities will include a "Let's Move" series, literature series, children cooking demonstrations and themed events.

Weeksville Heritage Center, Brooklyn.(\$10,000) A multi-tiered project that consists of a kitchen garden, farmers' market, cooking workshops and two in-school gardens that work to increase access to fresh produce and nutrition education, while preserving African American gardening and cooking traditions in Central Brooklyn.

LONG ISLAND:

Amber Waves Farm, Amagansett.(\$10,000) A project that will encourage local organic farmers to sell surplus produce to Long Island Cares, the local food bank, which in turn will make more organic produce available to low-income families throughout Long Island.

Long Island Cares, Inc.-The Harry Chapin Food Bank, Hauppauge.(\$10,000) A collaborative effort where Long Island Cares will purchase and deliver local Long Island produce weekly to two Catholic Charities senior sites in Freeport and Wyandanch.

Town of Southampton. (\$10,000) The youth-run Flanders Farm Fresh Food Market Project buys only from Southampton farmers. Entering its second year of operation, the market is located in a town with no grocery store and held weekly at a senior center on the main bus line.

Wyandanch Community Development Corporation, Wyandanch..(\$10,000) The Shiloh Community Farmers' Market is a new community-based, youth-staffed market that will increase access to fresh produce to low-income residents by accepting FMNP and Food Stamps.

US Department of Labor News

Labor Department Statement on Withdrawal of Proposed Rule Dealing With Children Who Work in Agricultural Vocations

April 26, 2012, Washington D.C. — The U.S. Department of Labor today issued the following statement regarding the withdrawal of a proposed rule dealing with children who work in agricultural vocations:

"The Obama administration is firmly committed to promoting family farmers and respecting the rural way of life, especially the role that parents and other family members play in passing those traditions down through the generations. The Obama administration is also deeply committed to listening and responding to what Americans across the country have to say about proposed rules and regulations.

"As a result, the Department of Labor is announcing today the withdrawal of the proposed rule dealing with children under the age of 16 who work in agricultural vocations.

"The decision to withdraw this rule — including provisions to define the 'parental exemption' — was made in response to thousands of comments expressing concerns about the effect of the proposed rules on small family-owned farms. To be clear, this regulation will not be pursued for the duration of the Obama administration.

"Instead, the Departments of Labor and Agriculture will work with rural stakeholders — such as the American Farm Bureau Federation, the National Farmers Union, the Future Farmers of America, and 4-H — to develop an educational program to reduce accidents to young workers and promote safer agricultural working practices."

USDA News

USDA Grants to Increase Farmers Market Participation in SNAP

Wireless Technology Funds to Broaden SNAP Beneficiaries' Nutrition Opportunities, Spur Local Economies

WASHINGTON, May 9, 2012 — Agriculture Deputy Secretary Kathleen Merrigan today announced awards to help States expand availability of wireless technology in farmers' markets not currently participating in the Supplemental Nutrition Assistance Program (SNAP). The \$4 million in funding provides SNAP participants greater access to fresh and healthy food, while supporting American farmers and local economies.

"Our country's 7,100 operating farmers markets offer opportunities to our children and their families to access healthy food across the country," said Deputy Secretary Merrigan. "SNAP participation at farmers' markets helps provide fresh fruit and vegetables to families and expands the customer base for local farmers - a win-win for agriculture and local communities."

In the past, farmers' markets, which usually do not have access to phone lines or electricity, have had difficulty redeeming SNAP benefits through the Electronic Benefit Transfer (EBT) system. As a result of funding provided by the Consolidated and Further Continuing

Appropriations Act, 2012, States may provide wireless equipment to currently non-participating farmers' markets, opening the door for their participation in the Program.

"This funding will help SNAP customers increase their opportunities to access healthy, local foods," added Deputy Secretary Merrigan. "And evidence suggests they will take advantage of that access. When we couple this approach with strategies like the education, cooking demonstrations, and community support often found at farmers markets, consumption of healthy foods should rise even more."

There are currently over 1,500 farmers markets using EBT technology. Since 2008, SNAP expenditures at farmers markets have increased by 400 percent.

In addition to the these federal funds being provided now to state agencies, USDA's Food and Nutrition Service (FNS) will soon post a Federal Register notice that will solicit public input on how best to use such funds in the future. As of the end of the last fiscal quarter, there were 1,548 farmers' markets participating in SNAP. USDA is looking to expand the number of participating farmers' markets and increase annual SNAP redemptions at these locations.

FNS administers 15 nutrition assistance programs that, in addition to the Supplemental Nutrition Assistance Program and National School Lunch Program, also include the Special Supplemental Nutrition Program for Women, Infants and Children, and the Summer Food Service Program. Taken together, these programs comprise America's nutrition safety net.

USDA National Farmers Market Directory lists farmers markets that accept SNAP and these other federal nutrition programs. It is available at <http://farmersmarkets.usda.gov>. With over 2 million page views last year, the directory is an easy-to-use tool that allows users to search for markets based on location, available products, and types of payment accepted—including participation in Federal nutrition programs. Newer features allow directory users to locate markets based on proximity to zip code and to see links to active farmer's market websites. The USDA Farmers Market Directory is based on self-reported information provided by the market managers. Market Managers can update their market's information for the 2012 season at www.usdadirectoryupdate.com.

USDA Farm Service Agency Announces Loan Program for Conservation Purposes

Syracuse, May 9, 2012 -- James Barber State Executive Director announces the availability of the Guaranteed Conservation Loan (CL) program that will provide farm owners and operators access to credit to implement conservation techniques that will conserve natural resources.

"This will give farmers who want to implement conservation measures on their lands a chance to do so by providing assistance with their up-front costs," said Barber. "In return, these producers will help to reduce soil erosion, improve water quality and promote sustainable and organic agricultural practices."

CL funds can be used to implement conservation practices approved by the Natural Resources Conservation Service (NRCS), such as the installation of conservation structures (i.e. manure digesters on farm, wind or solar generation, manure and silage storage); establishment of forest cover; installation of water conservation measures; establishment or improvement of permanent pastures; implementation of manure management; and the adaptation of other emerging or existing conservation practices, techniques or technologies.

Guaranteed CLs up to \$1,214,000 are available from lenders working with FSA.

For more information on the Conservation Loan program, contact your local lender, local FSA office or visit the FSA website at <http://www.fsa.usda.gov/>.

For more information about this announcement please see the March 2012 factsheet at:

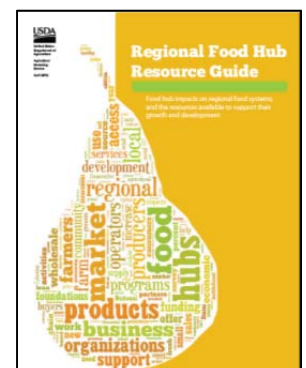
http://www.fsa.usda.gov/FSA/newsReleases?area=newsroom&subject=landing&topic=pfs&newstype=prfactsheet&type=detail&item=pf_20120306_consv_en_loans.html.

USDA Unveils New Food Hub Resource Guide to Expand Market Opportunities for Farmers and Ranchers

CHICAGO, April 20, 2012 – The U. S. Department of Agriculture unveiled the first [Regional Food Hub Resource Guide](#), bolstering its commitment to expand market opportunities for small and mid-sized producers. Agriculture Deputy Secretary Kathleen Merrigan introduced the new resource guide today at the National Good Food Network Food Hub Collaboration conference.

"The Regional Food Hub Resource Guide is an important tool to help promote local and regional efforts to support small and medium sized producers," said Merrigan. "Food hubs play a critical role in developing stronger supply chains and addressing the infrastructure challenges while supporting food access, regional economic development and job creation."

[Food hubs](#) are businesses or organizations that connect producers with buyers by offering a suite of production, distribution, and marketing services. It's an innovative business model that allows farmers of all sizes to meet the growing



consumer demand for fresh, local food by gaining entry into commercial and larger volume markets such as grocery stores, hospitals and schools.

The guide is an extensive collection of information and resources, providing background on everything needed to develop or participate in a regional food hub. The guide highlights the economic contributions food hubs make to local communities and the role they play in expanding regional food systems. It also outlines funding opportunities, support resources, best practices, strategies to address challenges and more. In 2011, USDA identified more than [170 food hubs](#) operating around the country.

"The new guide is the most comprehensive handbook on food hubs ever available," said Merrigan. "Now farmers, buyers, researchers, consumers or anyone interested in creating a food hub in their community can tap into a single resource to find the information that they need."

USDA's Agricultural Marketing Service (AMS) developed the Regional Food Hub Resource Guide in partnership with the [Wallace Center](#) at Winrock International, the [National Good Food Network](#), the [National Association of Produce Market Managers](#) and the [Project for Public Spaces](#), as part of the National Food Hub Collaboration. AMS works to support this collaboration through its research and outreach efforts.

The Regional Food Hub Resource Guide is part of USDA's commitment to support local and regional food systems. These investments, including the online food hub portal, the [Farmers Market Promotion Program](#) and the National [Farmers Market Directory](#), are highlighted in USDA's Know Your Farmer, Know Your Food (KYF) Compass. The [KYF Compass](#) is a digital guide to USDA resources related to local and regional food systems. The Compass consists of an [interactive U.S. map](#) showing local and regional food projects and an [accompanying narrative](#) documenting the results of this work through case studies, photos and video content.

A large selection of USDA-supported programs and projects is also visible on the [KYF Map](#), which can be displayed by theme, program, or recipient type. Both the [KYF Compass](#) and map will be regularly refreshed with new data and case studies.

On the Organic Side

Conservation Funding for Organic Farmers (NRCS) – Apply by June 1, 2012

The Natural Resources Conservation Service is providing funding for conservation projects through the Environmental Quality Incentive Program (EQIP), to be implemented by organic farmers and farmers transitioning to organic. Conservation proposals can include irrigation and water management measures, improved grazing technology, pest management plans, and more. For more information about this funding opportunity visit http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/?cid=nrcs143_008224.

Worker Protection Standards – Make Sure You Are in Compliance Organic Grower! – Laura McDermott, Capital District Vegetable and Small Fruit Program

All farmers, **including organic farmers**, that employ (for any compensation including academic credit, room and board or credit on a CSA share) people other than their immediate family to work in fields or greenhouses that have been treated with a pesticide of any nature (botanicals, organic accepted etc.) must comply with the [federal Worker Protection Standard](#). This includes maintaining current pesticide use information at a central location, training workers/handlers and providing them with proper notice of treatments and making them aware of the location of water, soap and paper towels in case of some type of exposure event. These items don't need to be provided for workers if they are kept out of treated areas for 30 days after the expiration of an REI. The challenge for some organic farmers is that the farmers/employers need to be certified pesticide applicators or handlers in order to legally train employees about the WPS.

To understand if you fall into the category of organic farmer that is applying a pesticide, whether it is organically approved or not, that still falls within the WPS, you must check the product label. For example, most copper based fungicides that are labeled for crop protection contain an [Agricultural Use Requirements section and reference to the Worker Protection Standard \(WPS\)](#). In fact, the restricted entry interval (REI) for them is 48 hours.

This issue was brought to our attention by DEC pesticide inspectors who along with our help, would like to make every effort to assist growers in their efforts to become compliant. Please call your local Cooperative Extension Educator if you have any questions. Do not delay in at least inquiring about how you can become compliant. WPS non-compliance falls into the category of pesticide use violations and carry fines dependent upon the infraction. Please click here for information about [NYS private pesticide applicator certification](#), or here for [Statewide testing dates](#) and here for [private applicator record keeping](#).

Focus on Food Safety

Opportunity to participate in Farm Food Safety Study

To identify field level management practices that may increase the risk of Salmonella contamination.

Produce food safety continues to be important for all fresh fruit and vegetable growers. Conducting on-farm risk assessments and implementing Good Agricultural Practices (GAPs) are things growers should be doing to help ensure the safety of the produce they grow.

Research allows GAPs recommendations to be science-based, so the better the science the better the recommendations. Sometimes the best science that is available is based on laboratory experiments that are not able to take the natural variation of a farm environment into account which is why on-farm studies are encouraged. On-farm studies are expensive, time-consuming and require grower cooperation but provide data based on real production practices, not simulated practices.

New York fruit and vegetable growers (you) have the opportunity to participate in an on-farm research study focused on identifying field level management practices that may influence the risk of *Salmonella* contamination. This study is focused on field sampling and a short set of questions about farm management practices. Farm management practices such as encouraging or discouraging environmental sources of contamination such as wildlife or by modifying how and when you apply surface water irrigation can have a significant impact on produce safety. In a 2007 survey administered to growers, 89% indicated they had adopted at least one management practice in response to preharvest food safety concerns.

What types of growers can participate?

Produce growers who would be willing to allow us to obtain soil and water samples from their fields and answer a few short questions about management practices.

What is the time commitment?

Very little! We would only visit your farm once between mid-June and mid-July. The questions will take ~20 minutes to answer.

What is the benefit to you?

This type of research helps us make science based recommendations based on real world practices.

Additional information...

ALL INFORMATION IS CONFIDENTIAL! All findings will be communicated to participants if they wish. All participation in this study is free. We are seasoned samplers and respectful of all farm/field activities. Ultimately, we aim to foster a partnership with NYS produce growers and work together to enhance NYS produce food safety – please feel free to ask any questions!

Interested?

Please contact me, Laura Strawn, at LKS67@cornell.edu or Betsy Bihn, at eab38@cornell.edu. Thank you! Laura

Tunnel Talk

Seasonal High Tunnel Program (NRCS) – Apply by June 1, 2012

Looking to extend your season, or improve yields of warm climate crops? Apply for a National Resource Conservation Service grant for financial and technical assistance in building a high tunnel on your farm.

For more information visit this site: <http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/?&cid=stelprdb1046250>, or contact your local NRCS office.

Focus on Pest Management

Entrust is Approved for Suppression of Blueberry Maggot on Bushberries in NY

The NYSDEC has recently approved the following 2(ee) recommendation: Entrust (EPA Reg. No. 62719-282) – approved for the unlabeled pest blueberry maggot in bushberries.

Apply Entrust to bushberries at the rate of 1.25 to 2 oz per acre to suppress blueberry maggot. Use a higher rate in the rate range for heavy infestations. The minimum re-treatment interval is 6 days. Read the label affixed to the container for Entrust and follow all use directions and restrictions for bushberries.

Note: Users must have a copy of the [Entrust 2\(ee\) label](#) in their possession at the time of use

Weed Science Society of America Endorses Strategies to Reduce the Threat of Herbicide Resistance to Agricultural Productivity

The Weed Science Society of America (WSSA) has announced that its Board has endorsed a series of best management practices designed to reduce the incidence of herbicide-resistant weeds and the threat they pose to agricultural productivity. Chief among them are recommendations that growers diversify their weed management practices and the types of herbicides they use.

“Today it is common to rely on repeated use of a single class of herbicides,” says Rod Lym, WSSA president. “It is clear we need a different approach if we want to protect the future effectiveness of these products, which are important tools for famers.”

WSSA plans to present its recommendations during a May 10 scientific summit on herbicide resistance organized by the National Research Council, the operating arm of the National Academy of Sciences. The event will be held at George Washington University in Washington, D.C.

WSSA scientists say the single most important factor contributing to resistance is overreliance on a single herbicide — or group of herbicides — with the same mechanism of action. Weeds most often develop resistance in response to such repeated and exclusive exposure, which renders the herbicide ineffective over time.

The best management practices recommended by WSSA to combat herbicide resistance include common-sense, diversified approaches to weed management — from proactive steps to reduce the number of weed seeds in the soil to the use of well-established cultural practices to suppress weeds through crop competition.

The WSSA's report says there are barriers to widespread adoption of best practices, especially when the associated costs are considered. A short-term focus on less expensive approaches to weed control tends to prevail over concerns for the future economic toll of herbicide-resistant weeds.

"Many in agriculture are in denial," Lym says. "They seem convinced they can ignore the threat of resistance and wait for new herbicides to come along and solve the problem. Yet the discovery of new herbicide chemistries is very rare. A solutions-based approach that incorporates all the tools at hand is essential."

WSSA Recommendations for Other Key Stakeholders

In addition to best practices for growers, the WSSA report also recommends important steps that other key stakeholders should take to address the increasingly urgent problem of herbicide resistance. Examples include:

- Requiring that product labels show each herbicide's mechanism of action – helping growers more readily identify suitable products for a diversified weed management program.
- Developing government and industry incentives to encourage adoption of best practices.
- Using federal, state and industry funding to support education programs and to pursue research that will help everyone learn more about resistance.

"Herbicides are critical to the sustainability of agriculture and to the security of our food, feed, fiber and energy," Lym says. "It is time for us to treat them as the scarce resources they are. Using herbicides in an appropriate way as part of an integrated weed management program can mitigate resistance and preserve herbicide effectiveness for future generations."

The WSSA's recommendations and full report, including supporting scientific references, are [accessible online](http://wssa.net/Weeds/Resistance/BMPExecutiveSummary.pdf) (<http://wssa.net/Weeds/Resistance/BMPExecutiveSummary.pdf>). The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) supported the development of the document.

Recommendations from the Weed Science Society of America

The Weed Science Society of America (WSSA) says that effective herbicide-resistance management programs must consider *all* available options for effective weed control and use the following best management practices (BMPs):

1. Understand the biology of the weeds present.
2. Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil seed-bank.
3. Plant into weed-free fields and then keep fields as weed free as possible.
4. Plant weed-free crop seed.
5. Scout fields routinely.
6. Use multiple herbicide mechanisms of action that are effective against the most troublesome weeds or those most prone to herbicide resistance.
7. Apply the labeled herbicide rate at recommended weed sizes.
8. Emphasize cultural practices that suppress weeds by using crop competitiveness.
9. Use mechanical and biological management practices where appropriate.
10. Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
11. Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.
12. Prevent an influx of weeds into the field by managing field borders.

In addition to recommending specific BMPs, the WSSA recommends/endorse the following:

1. Reduce the weed seed-bank through diversified programs that minimize weed seed production.
2. Implement an herbicide mechanism of action labeling system for all herbicide products, and conduct an awareness campaign.
3. Communicate that discovery of new, effective herbicide mechanisms of action is rare and that the existing herbicide resource is exhaustible.
4. Demonstrate the benefits and costs of proactive, diversified weed management systems for the mitigation of herbicide-resistant weeds.

5. Foster the development of incentives by government agencies and industry that conserve critical herbicide mechanisms of action as a means to encourage adoption of best practices.
6. Promote the application of full-labeled rates at the appropriate weed and crop growth stage. When tank mixtures are employed to control the range of weeds present in a field, each product should be used at the specified label rate appropriate for the weeds present.
7. Identify and promote individual best management practices that fit specific farming segments with the greatest potential impact.
8. Engage the public and private sectors in the promotion of best management practices, including those concerning appropriate herbicide use.
9. Direct federal, state and industry funding to research addressing the substantial knowledge gaps in best management practices for herbicide resistance and to support cooperative extension services as vital agents in education for resistance management.

Root Problems in Strawberries – Laura McDermott, Capital District Vegetable and Small Fruit Program

This year strawberry plantings have looked particularly weak after going through the winter. Perhaps this should be expected as the lack of winter snow cover left plants vulnerable to winter desiccation and cold injury. The hot dry spring also stressed plants followed by lots of cold weather to hold them back, so the fact that they are finally hitting their growth stride is quite amazing.

Some plantings however are not rebounding even with the plentiful moisture and occasional nitrogen application. These plants remain unthrifty looking, and some are even wilting. If you dig them up, look at the roots and try to determine if there is root feeding. Keep your eyes open for white grubs as these have been reported to be a problem in strawberry fields this year from Ontario to Maine. Similar plant symptoms can be the result of root weevil, and Verticillium wilt, so a root examination is important.

White grubs are immature scarab beetles and are traditional turf pests. Japanese Beetle, Asiatic beetle, European chafers and June beetles make up the white grub complex that can infest strawberry plantings. All of these beetles are largish, hard-shelled beetles which fly at night and are seldom seen on plants, but their C-shaped larvae are found in the soil and these grubs are what do the most damage. The adult beetles actively lay eggs beginning in late May through August (egg laying period depends on the species). The eggs are laid in grassy places where they hatch into larvae (white grubs) and feed on roots. Most species larvae feed in late summer and then again in the spring until the adults emerge, but June beetle larvae remain in the soil for three seasons where they feed continually on plant roots.

To control white grubs, do not follow sod or pasture crops with strawberry plantings. Use a cover crop for at least one season to break the cycle. Sites that have light soil and are surrounded by grassy parking areas may experience the heaviest pressure. Admire-Pro can be used to control white grubs.

Verticillium Wilt is a soil borne fungal disease that like white grubs is most devastating to plants in their first year of growth. Outer leaves turn brown and eventually collapse, but inner leaves will remain green until the bitter end. The affected plants typically appear throughout the planting in a random fashion. Many weeds are host of Verticillium including nightshade, groundcherry, redroot pig-weed, lambsquarters and horsenettle making weed control critical to Verticillium management. Actinovate AG can be used as a preventative soil drench, but fumigation is the only sure way to eradicate Verticillium. Resistant varieties include Earliglow, Guardian, Allstar, Tribute and Tristar.

Root weevils including the strawberry root weevil, the black vine weevil and the rough strawberry root weevil all attack the roots or crowns of plants while in the grub stage. The larvae cause serious damage by tunneling in the roots and crowns in the spring of the year. Injured plants appear stunted; the leaves are closely bunched and are dark and blue-green. The fine roots have been destroyed, and sometimes even the hard fibrous roots have been eaten.

Heavily damaged areas in the field can be large and circular, because of the beetles' behavior of gathering in groups. Newly transplanted straw-berries are particularly susceptible to black vine weevils.



There are no resistant cultivars known. If root weevils exist, rotation away from infested area for at least 1 year will help. Setting up barriers might also be effective this limits the movement of the adult. Parasitic nematodes have been shown to be effective. Brigade is the only insecticide labeled in NYS for the control of root weevil. This should be applied at a rate of 8-32 oz/A in mid-late June.

(Reprinted with permission from: Capital District Vegetable & Small Fruit Weekly Update, Vol. 4 Issue 9, May 24, 2012)

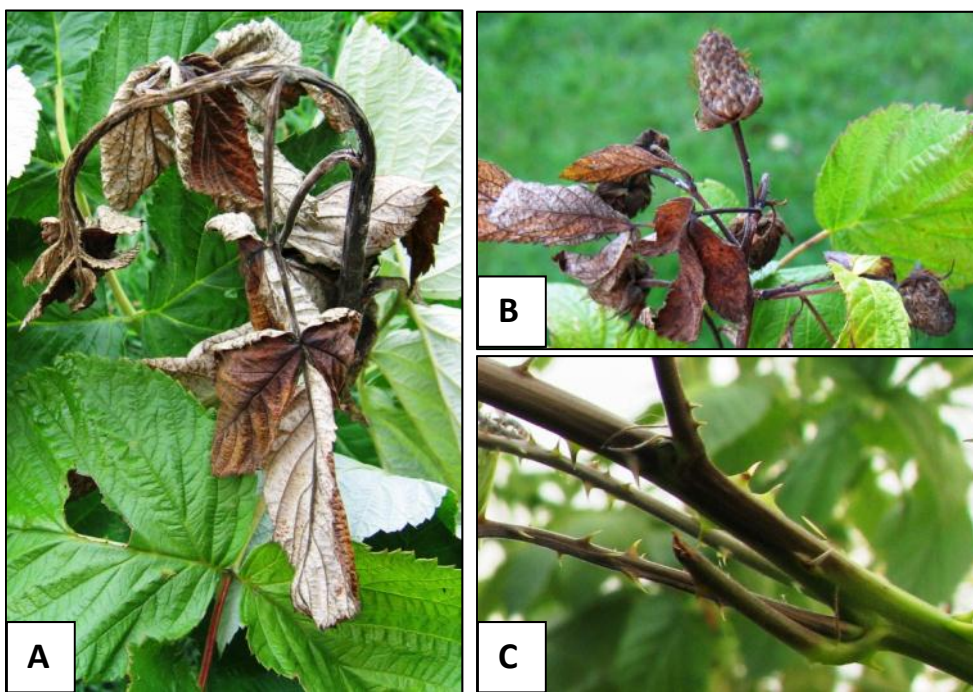
Disease Snapshot: Fire Blight of Raspberry - Zachary Frederick, Graduate Student and R. Kerik D. Cox, Assistant Professor Plant-Pathology & Plant-Microbe Biology, Cornell University

Causes: *Erwinia amylovora*

When to watch for it: Spring

First line of defense: Prune out cankers from infected canes to prevent *E. amylovora* from overwintering

Summary: Fire Blight caused by *E. amylovora* is a common and very serious disease of members of the rose family (Rosaceae). Infection begins in the spring once temperatures are above 18°C. This is when overwintering cankers ooze and provide the primary inoculum. The bacteria-laden ooze can be spread by spring rains, wind, and pollinating insects to flowers, cane tips, and developing lateral shoots. Later infections have been also known to infect fruit. Infections appear initially as water soaked lesions that gradually become sunken and darken as they progress. Infected fruit usually turn brown and degrade, whereas primocane tips blacken entirely and can form the characteristic shepherd's crooks. New cankers can form from infected cane tips.



Above, **A:** Primocane tip blight creating a characteristic shepherd's crook. **B:** The pathogen can attack developing fruit, preventing maturation. Infected fruit do not often abscise. **C:** Infections from cane tip can extend up to 20 cm down the cane and infect auxiliary buds.

Herbicide Considerations for Berries - Laura McDermott, Capital District Vegetable and Small Fruit Program

Spring of 2012 has been a challenge for berry growers in the northeast as weather has veered from the mid-80's in March to a low of 17 degrees in late April. The temperature fluctuation combined with unusual soil moisture conditions – VERY dry in April and wet in May – made weed control a challenge.

Pre-emergent broadleaf materials (i.e. Chateau for strawberries and Callisto and Velpar for blueberries) should go on before plants break dormancy. Some consultants don't even recommend Chateau for a spring application at all since it is difficult in strawberries to know when the plants have broken dormancy. Chateau damage can look like mottled discoloration, but eventually will have burn-like lesions develop. In most locations there was still sufficient rain during April that residual materials should have been activated. In some of the driest locations some growers did irrigate which would have helped with the herbicide activity.

The real problem was that soils warmed early, initiating grass growth before expected, so pre-emergent products like Devrinol, Surflan and Prowl H2O may not have prevented grass break through. Some growers like to use split applications to extend activity period and to make

up a missed application. Be aware that many of the materials have a pre-harvest limit to when herbicide can be applied, so at this date it will be too late for most strawberry plantings, but still a possibility for some other berry crops.

Post-Emergent grass materials - Select and Poast – have a wider window for applications. These materials should be applied before grasses are 2-4" high – but the grower should wait one week if the grass is just emerging and then make the application. These products should not be applied on hot humid days. Use this formula to help know when you should NOT spray: temp F + humidity = 150 or greater? That means do not spray. The oils that are used as surfactants can cause foliar burn. If you have a series of these days but really need to apply, do so late in the day; morning applications don't allow enough time and burning may still result.

Post-Emergent nonselective herbicides (Gramoxone, Firestorm, Roundup) are often used to burn back emerged weeds. These materials are much more difficult to use after plants break dormancy. The applicator needs to do an excellent job shielding plants from drift to avoid stunting. Also be aware that these burn down products are not translocated. If the growing tip of grass is shielded below the soil, then the weed will survive.

Much of this information was shared by Dr. Rich Bonanno, the weed specialist at UMass Extension, during a spring season conference call. Supporting information is from the [2012 Cornell Pest Management Guidelines for Berry Crops](#).

For the Birds, Or Not? Managing Bird Problems in Strawberries - Alan Eaton, University of New Hampshire

Birds are intelligent pests (compared to fungi, weeds and insects, anyway), and they learn. Unless you rely on a complete exclusion method (netting, for example) vary the control methods you use, and combine several methods together. Birds quickly get used to scare techniques, so it helps to change them, and add new methods. Bird problems vary considerably from site to site, due to different crops, and differences in other food or resting/nesting cover nearby. It is important to identify which species of birds are giving you problems, because they vary in their behavior and preferences. It is helpful to handle problems before a strong feeding pattern develops on your crop. It is harder to stop a strong feeding pattern than one that is just starting.

Some birds tend to flock during the growing season. That means damage quickly becomes significant, with so many birds eating. Scare methods usually work better on flocking species than non-flocking ones. Here in New England, flocking species that attack small fruit include cedar waxwings, starlings, grackles, blackbirds, turkeys, Canada geese, and (sometimes) crows.

Other pest species tend to occur in resident pairs or small family groups (mom, dad and the kids). Resident pairs invest a lot in finding and defending a home territory from others of their species. They are very hard to scare away. Robin, catbird, mockingbird and orioles are examples of these.

In strawberries, cedar waxwing, turkey, robin, blue jay and crow are our most common pest species, but others occur.

A good approach is to identify the birds causing the problem, and come up with a plan that works for those species.

Bird netting is the most effective tool we have to help with bird damage in small fruit. It is more appropriate for perennial crops like blueberries or grapes than strawberries, but there are some effective types for strawberries. Netting is expensive, but it can last for years. Most netting restricts your ability to move equipment through that field. This is something to think about before making a netting purchase. Most types are designed to be supported by a system of support wires. Recent minor modifications in netting design have made MAJOR improvements in the ease of setting up and taking down netting.

One of the new designs (smartnet) features reinforced edges, so that the sections can slide out when needed, and slide back and be bunched up out of the way, when not in use. Our blueberry and cherry growers with these systems just cover the bunched up net with black plastic, and store it in place most of the year. This tremendously reduces the labor for annual setup and removal. The support system of posts and wires stays up all year. Blueberry netting and support system might cost \$2200-3600/A. That sounds expensive, but if done correctly, it could last 10 or more years. New England research shows bird losses to highbush blueberries can average 41%, equivalent to \$4,000/A or more annually.

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In New Hampshire, NRCS offers cost-sharing for bird netting. Other states may have similar programs. If you investigate, you might be able to purchase netting at almost no cost to the farm.

A couple of manufacturers are offering netting that can be laid right over strawberry plants. With care, several workers can pick up the edge (as you would with a large row cover) and pile it out of the way, allowing access for pickers. Then it can be put over the crop again, when picking hours end. Two Connecticut River valley growers report great success with this method this year. It may be especially useful for a relatively small planting that is heavily hit by birds...cedar waxwings for example. One product is smartnet's bird/hail/insect netting, but there are others, too.

Noisemakers: All of our bird species become habituated to noises, so it is important to vary them, and use them in combination with other methods. Flocking species are usually more easily scared off than resident pairs. Juvenile birds (under 1 year old) are usually harder to scare off; they haven't learned to be afraid of the noises yet. Noisemakers include 1) pyrotechnics (screamer, banger shells fired from gun or

launcher, firecrackers) 2) banging aluminum pans, 3) automated distress calls, 4) propane cannons, 5) critter getter, and others. There is a very wide variety of choices, and a wide range of prices and features. Before buying a very loud device (propane cannon for example), carefully consider the possible severe annoyance to neighbors. In my state, there have been lawsuits (with media coverage) and vandalism associated with cannons.

Shooting: This option has limitations. Federal, State and local laws can affect your ability to legally shoot birds. Some species are off-limits. Shooting can be very annoying to neighbors, customers, and other people. There are also safety concerns. When it is allowed, the main effect is to deter the survivors from more crop feeding, not reduce bird numbers.

Visual scare devices: As with noisemakers, incorporate variability, and use these in combination with other methods. There are hawk and owl effigies. They can be useful if placed realistically, and moved to different locations regularly. Those that incorporate movement can be more effective than those that do not. Predator silhouettes are sometimes used to scare geese away from lawns or turkeys away from feed silos. Various flashing mirrors or tape, or balloons are available. Often their effective range is short...a few yards. There are raptor-shaped kites that can be suspended from balloons in a realistic manner.

Clearly one of the most effective visual scare methods for crows and ravens is to prominently hang up a dead crow. Here, we usually hang a bird by a wing, so the birds clearly recognize what it is. Of course, shooting a victim for display must be done according to local laws. Customers can be deterred by the sight, or the “farmer Rambo” image.

Taste repellents: There are a limited number of situations where taste repellents can be used. Currently, none are legal for use on strawberries, but that may change. Methyl anthranilate is one choice (artificial grape flavor). A new option is anthraquinone. Its label is gradually being expanded to more crops, and might (?) eventually be registered on fruit.

Habitat modification: Some birds really like to have thick roosting cover next to your crop, or perhaps are attracted first by lots of wild berries. If you can eliminate or reduce them, you can reduce some bird problems. For example, shadbush, cherries, mulberry and red cedars are very attractive to cedar waxwings. Studies in the Northwest have shown that providing hawk/owl perches or nest boxes in places where they are limited, will increase the number of raptors hunting there. I have a publication on my website that gives dimensions and other details for target species here.

Falconry: A live, day-active raptor is very effective at reducing bird problems. Birds know what hawks/falcons look like, and if they are abundant, many birds move elsewhere. In some states, there are enough falconers that you might consider asking one to exercise his/her birds at your farm. Perhaps you can offer fruit in exchange?

Here are some brief descriptions of the top small fruit offenders in New England: **Cedar waxwing** is arguably the most serious bird pest of New England berries. It is a flocking species with a thin whistle for a call. The bird is gray, 7” long, (smaller than a robin) with a yellow tipped tail. It strongly prefers berries to eat. **Robin:** gray with red-brown breast, 10 inches long. **Crow:** 17”, all black, distinctive call. **Raven:** 24” all black, with wedge-shaped tail, croaking call. **Gray catbird:** 8.5” long, all gray. Sometimes the brown vent patch is visible. **Mockingbird:** 10”, all gray, but with white patches in wings that show when it flies. **Turkey:** 36” or longer. Black with white & brown markings. **Blue jay:** 11”, blue, black and white.

More Information: Much more information than I can cover here is in my recent 20 page publication “Bird Damage Prevention for Northern New England Fruit Growers”. If you don’t get a copy at the New England Vegetable and Berry Conference, you can download a copy at <http://extension.unh.edu/Agric/AGPMP/PMPIP.htm> It includes a long list of suppliers.

Also at UNH Cooperative Extension’s website is my shorter publication “Raptors in New Hampshire Orchards. It covers nest boxes to lure certain predator species. <http://extension.unh.edu/Agric/AGPMP/Pubs/Apft5902.pdf>

In New Hampshire, NRCS currently has a cost-sharing program on bird netting. Contact your county NRCS office for details. I do not know if the other New England states currently have similar programs. Books on identifying birds are widely available to help you.

(Reprinted with permission from: Proceedings of the New England Vegetable and Fruit Conference, December 13-15, 2011.)

Strawberry Harvest & Storage/Shipping Considerations *Craig Kahlke, Lake Ontario Fruit Team*

Despite the trials and tribulations of this wacky late winter and early spring, there is some fruit out there and therefore strawberry harvest will soon be underway. Thus now is a good time to discuss handling of the fruit associated with harvest and post-harvest activities. Strawberries are among the most perishable of all fruits, and thus it is critical that marketing channels are open before harvest starts. Strawberries are extremely susceptible to bruising, and rough handling at harvest and during any time thereafter will encourage fungal growth and decay. It is critical that personnel be trained in the careful picking and handling of fruit. In addition, fruit quality declines as the season progresses, so the highest quality fruit will be earliest in the season. With varying degrees of ripeness in single plantings, it is also extremely important that the fruit is harvested as near peak ripeness as possible.

Strawberries Destined for Direct Markets

Since most strawberry markets in the Northeast are consumed very close to the farms in which they are produced, many growers lack and may not need the cooling methods and storage facilities used by long-distance shippers such as those employed by the production areas in California and Florida. Direct market channels are ideal for many growers in the Northeast, as fruit loss is further accentuated from shipping from the farm to wholesalers, and from the wholesalers to retail markets. By bypassing wholesale shipping, fruit loss due to bruising and fungal decay can be reduced by an average of 20%. For optimum quality, it is critical that direct market fruit is harvested at or very near peak ripeness. Top quality strawberries should be fully ripe, with a uniform red color, be firm, flavorful, and show no signs of decay or disease.

Temperature is the single most important factor affecting shelf life of strawberries.

If cooling down to the recommended 32 F is an issue for growers, research shows that strawberries held at 50F storage at high humidity will benefit storage life greatly as compared to room temperature storage. In addition, strawberries at 50F tend to retain their color and glossy appearance better than berries stored at 32F. Many direct-market local growers claim approximately 90% of their strawberries are consumed the day they are harvested, thus in these cases, it is very critical that the berries be at peak ripeness. The berries are most often harvested in morning only when field heat is low, are usually then shipped out to markets on refrigerated trucks the same morning, reach the retail shelves by afternoon, and are bought and consumed within a day or two.

Strawberries Destined for Long-Distance Markets

For strawberries that are being transported beyond local markets, there are two factors that impact on maximum shelf life potential. First, the fruit will hold up better if they are harvested at the white tip stage, rather than fully ripe. Second, cooling is critical. As soon as harvest occurs, it is imperative that field heat is removed from the fruit. It is recommended that cooling is started within an hour of harvest. Ideally, 32F forced-air cooling with high humidity (90-95% RH) is recommended. Refrigeration without forced air can also be used; however, shelf-life will be shortened. Proper forced-air cooling removes field heat from fruit in around 90 minutes, while simple refrigeration without forced air can take about 9 hours. Proper ventilation around, below, and above the fruit is essential for removing field heat quickly. Covering containers with plastic prior to cooling, and not removing plastic until berries are at room temperature for several hours after reaching market shelves will prevent condensation buildup on the inside of the bag and delay fungal growth. It is estimated that for each hour delayed in cooling the fruit results in reducing shelf life of fruit by one day.

Following field heat removal, shipping on refrigerated trucks to market destinations is essential. If cold storage will be limited at market destination, as stated in the section on direct marketing, research shows 50F storage at high humidity will benefit storage life greatly as compared to room temperature storage. If all precautions are taken from harvest to cooling to storage, shelf life from harvest to market and on the consumer's table can be up to 10-14 days maximum for strawberries, but likely averages more like 7 days in the Northeast. For growers interested in exploring the potential of longer distance markets, including more information on how to set up an inexpensive forced-air cooling system for berries and many other types of perishable produce, please contact Craig Kahlke at 585-7355448, or email at cjk37@cornell.edu. In addition, see more information in a future Berry News.

Acknowledgments – I wish to thank the late Jim Coulter, Marvin Pritts and Chris Watkins for their help in providing information for this article.

Resources:

1. Strawberry Production Guide for the Northeast, Midwest, and Eastern /Canada, NRAES-88. 2008
2. Pest Management Guidelines for Berry Crops, Cornell University, Cooperative Extension.
3. Shin, YJ, Liu, R.H., and Watkins, C.B. Temperature and relative humidity effects on quality, total ascorbic acid, phenolics and flavonoid concentrations, and antioxidant activity of strawberry. *Postharvest Biology and Technology* 45: 349-357, 2007.
4. USDA, ARS Agriculture Handbook Number 66, The Commercial Storage of Fruits, Vegetables, and Florist and Nursery Stocks.

Hydroponic Strawberries - Molly Shaw, South Central Ag Team

(Author's Note: Based on info from a Cornell Berry Nutrition webinar presented by Dr. Bielinski Santos, University of Florida.)

Interest in hydroponic strawberry production is growing, even in the Northeast. Field production of strawberries is frustratingly variable, depending not only on weather conditions during harvest, but also on overwintering of plants, weather in the fall, soil pest pressures, etc. Hydroponic production is an attractive alternative to some growers who either don't have good soil for strawberries, or are sick and tired of the year-to-year variability of field production. Of course, hydroponic strawberry production entails a much bigger investment than traditional matted row production.

First off, hydroponic strawberries are generally replanted every spring, and day-neutral varieties are used so that fruiting can last from May-November. Grower experience in NY has been that Seascape and Albion are the most reliable day-neutral varieties, while Evie 1 and Evie 2 haven't been so stellar. Varieties developed and used in Florida or California often don't perform well for us in NY, and should be tested on a small scale before relying on them.

Hydroponic production systems can be open air or covered in a high tunnel or greenhouse. The big advantage of a covered system is eliminating rain, and therefore most of the gray mold pressure. Of course the big disadvantage is cost, and the need to vent thoroughly to get rid of excess heat in the summer (strawberries don't set flowers well when it's too hot). Vertical (stacker) systems do save on space, particularly nice if you're growing under cover, but sometimes have problems with shading on the bottom stackers. Lots of permutations on horizontal production are out there—troughs, even converted greenhouse benches filled with media.

Dr. Santos listed a wide variety of media that growers use—from perlite, vermiculite, sand and rockwool to coconut coir, peat, pine bark, rice hulls, and even compost. Fertilization and watering practices do differ between the media, but none provide significant nutrients. That means the plants' nutrient requirements are all up to you—the grower.

Nutrients can be mixed up from solid sources, water-soluble salts. When using these, the grower has to be very careful not to get precipitation of nutrients from the mix, and usually different stock tanks of concentrated solutions are used for each type of nutrient (micronutrients, acid (pH adjustment), nitrogen, phosphorus, etc.). Using a ready-mixed liquid solution is more expensive, but growers in Florida generally opt for this because it takes out the danger of precipitation—all that is balanced at the factory before it gets to the farm. Nutrients are added to the irrigation system in two ways. Venturi devices use the vacuum created by a flowing fluid to suck nutrient solution from a stock tank, but the rate varies if the water pressure varies. Dosatron injects nutrient solutions into irrigation lines in a prescribed ratio, but cost more than Venturi devices.

In Florida, field production of day-neutral strawberries is actually very close to hydroponic production because their soils are so extremely sandy, and plants are grown on raised plastic-covered beds. Dr. Santos shared his experiences with adjusting nutrients for field production as they are similar to hydroponic situations.

Growers in Florida generally use 1-1.5 lbs. of actual nitrogen per day delivered through the drip system. They use about the same rate of potassium, sometimes a little higher. The common belief is that adding extra K later in the season increases fruit quality, but research doesn't bear this out. What research does show is that some varieties require more N and K to reach their full potential than others. All nutrients are delivered through the irrigation system, so the fertilization is only as good as the irrigation. Having a solid irrigation system is a prerequisite to having good fertilization.

With all the variable factors (media, variety, climate, season), how can you figure out the best fertilizer balance for your own plants? Florida growers use leaf analyses extensively, 2-3 times per season, to fine-tune their fertilizer applications. Keeping tabs on the salts level and pH of the nutrient solution is also important. pH should be between 6.2 and 7.6, and the fertilizer solution shouldn't have an EC (electrical conductivity, a measure of salts) higher than 2.0 ds/m, or strawberry roots will be damaged. Sounds like investing in a \$130 pH/EC meter is a good idea for hydroponic growers.

Surprisingly, the ranges of adequate leaf nutrients in strawberries seem to be pretty close to the same, whether they're varieties being grown in California, Florida, or presumably NY. The fertilizer needed to achieve those levels varies more. That means you can take a leaf analysis and use the extensive research done in Florida to interpret the results in NY hydroponic systems, at least for a good starting point. Dr. Santos is pretty comfortable with the ranges they have developed for the major nutrients as well as most of the micronutrients, though Ca and Sulfur sufficiency ranges might need to be bumped up a little.

If you want to dabble in hydroponic strawberry production, definitely budget in leaf analyses and a good pH/EC meter that can be calibrated. You'll be using them a lot!

Mite Control Options In Berry Crops - John Wise, Rufus Isaacs and Larry Gut, MSU Extension *Many options are available for controlling mites in berries.*

(Editor's Note: This article has been adapted from its original content to reflect products registered for use in mite control in NY State.)

Mites can be significant pests of fruit crops. There is an array of miticides available for control of the European Red Mite (ERM), two-spotted spider mite (TSSM) and rust mites (RM), such as blueberry bud mites. But their performance characteristics are not all alike.

The following table is designed to summarize several key variables that can help you determine which miticides are optimal for your integrated pest management program.

Compound	Fruit crop	Mites	Life stage target	Seasonal timing	Residual control
Stylet Oil, Organic Stylet Oil	bushberry, caneberry, strawberry	ERM, TSSM, RM	egg/larvae	Early (pre-bloom)	2-6 weeks
Savey DF	caneberry, strawberry	TSSM	egg/larvae	Mid (or threshold)**	6-8 weeks
Agri-Mek 0.15EC	strawberry	TSSM	motiles*	Mid (or threshold)	6-8 weeks
ABBA 0.15EC	strawberry	TSSM	motiles*	Mid (or threshold)	6-8 weeks
Zeal	caneberry, cranberry, strawberry	TSSM	egg/larvae	Mid (or threshold)**	6-8 weeks
Kanemite 15SC	strawberry	TSSM	motiles*	Mid (or threshold)	6-8 weeks
Acramite 50WS	caneberry, cranberry, strawberry	TSSM	motiles*	Mid (or threshold)	6-8 weeks
Danitol 2.4EC	bushberry, caneberry, strawberry	ERM, TSSM	motiles*	Mid (or threshold)	4-6 weeks
Brigade WSB	caneberry, strawberry	TSSM	motiles*	Mid (or threshold)	4-6 weeks
Vendex 50WP	strawberry	TSSM	motiles*	Mid (or threshold)	4-6 weeks
Endosulfan 3EC	blueberry ¹	RM ³	motiles*	Mid (or threshold)**	2-6 weeks
Sulforix	blueberry	RM ³	motiles*	Late (post-harvest)	2-6 weeks

* Motile forms include mite larvae, nymph and adult stages.

** Optimally used petal fall through August when mites reach threshold.

¹ post-harvest only for blueberry

(Reprinted from: Michigan State University Extension News, April 24, 2012.)

Weather Reports

NEW YORK CROP WEATHER SERVICE NOTES

Week ending April 23rd: This is the first edition of the New York “Weather and Crops” for the 2012 season. The New York Agricultural Statistics Service looks forward to working with the Agricultural Weather Information Service, National Weather Service personnel, Agricultural Extension agents, USDA Farm Service Agency agents, and independent volunteer observers who collectively make this report possible.

Weather: High pressure controlled the weather April 15th through April 17th. Temperatures were above normal during the period with highs on April 16th in the 80’s to lower 90’s. A cold front tracked through the region early on April 17th and a reinforcing cold front tracked through late on the 17th and early the 18th. High pressure built into the region from Canada with cooler temperatures on the 18th. Temperatures were below normal on the 18th with highs in the 50’s. Then, high pressure built east of the region by the 19th and 20th helping to bring back warm temperatures to the region on south to southwest winds. Temperatures warmed back up into the 70’s on the 19th through the 21st. Low pressure tracked into the region on the 21st with locally heavy rain. Rainfall amounts across the region were between a half inch and 2 inches.

Small Fruit: In Ontario County, fruit trees, strawberries, and grapes continued to be stressed due to the fluctuation of temperature from the previous few weeks. In Broome County, blossom mortality was the concern after unseasonably warm temperatures brought on early blossoms and last week had cold temperatures. Early strawberries have suffered a 50 percent loss and sweet cherries a 100 percent loss due to freezing.

Week ending April 30th

Weather: Strong low pressure moved up the eastern seaboard on Sunday and Monday bringing widespread rainfall to New York State with snowfall near and to the west of Interstate 81. The low pressure system stalled over eastern Canada on Tuesday and Wednesday bringing cold showery weather to the state. The higher elevations all across New York received more snowfall during this time. A reinforcing shot of cold air brought more light rain and scattered showers to the state Thursday and Friday with snow over the higher elevations. Saturday was cool, dry and windy. Temperatures averaged below normal for the period and precipitation was above normal.

Small Fruit: In Cayuga County, strawberry and fruit tree growers had to use frost protection measures when overnight temps dropped in the twenties.

Week ending May 7th

Weather: The weather was unsettled much of the week with needed rainfall occurring. We started out with high pressure over the region and had issues with freeze and frost. The high moved eastward and shifted offshore Monday night then a series of low pressure systems moved across the region bringing bouts of rainfall chipping away at our deficits.

Small Fruit: In Cayuga County, producers were still determining the damage to fruit crops.

Week ending May 14th

Weather: The week started out dry and pleasant with high pressure in control. Low pressure moved along a slow moving cold frontal boundary bringing a widespread soaking rainfall Monday night into Wednesday. Total rainfall amounts ranged from half an inch to two and a half inches over much of upstate New York mainly north and west of the mid-Hudson Valley. An upper level low produced some scattered light rain showers on Thursday. High pressure built in from the Ohio Valley and mid-Atlantic region with warm and dry weather to close the week. Temperatures finished at normal to slightly above normal for the state.

Small Fruit: In Albany County, freeze assessments to orchards and small fruit continued. In Broome County, fruit producers reported a 25 percent loss on strawberries and raspberries and apple producers reported a 20 percent overall loss in apple blooms.

Week ending May 21st

Weather: Low pressure brought widespread rain to the southeast half of the state Monday and Tuesday. The only other day with precipitation was Wednesday which was in the form of scattered showers and thunderstorms. Overall for the week, one to one and a half inches of rain fell over the southeast half of the state with zero to a third of an inch of rain across the northwest half of the state. Temperatures averaged normal to above normal during the week.

Small Fruit: No reports.

Questions or comments about the New York Berry News?

Ms. Cathy Heidenreich, Cornell University Dept. of Horticulture, 630 W. North Street, Geneva, NY 14456

Phone: 315-787-2367 Email: mcm4@cornell.edu

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*Cornell University provides equal program and employment opportunity.

Weather Data for Week Ending Sunday, April 22, 2012

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}			
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm
<u>Hudson Valley</u>											
Albany	91	30	59	+12	74	87	+73	1.22	+0.52	1.36	-0.84
Glens Falls	87	27	56	+10	55	61	+54	1.25	+0.55	1.31	-0.84
Poughkeepsie	91	38	62	+13	85	108	+85	0.16	-0.68	0.44	-2.05
<u>Mohawk Valley</u>											
Boonville	81	24	50	+8	29	33	+27	0.97	-0.08	1.25	-2.18
<u>Champlain Valley</u>											
Plattsburgh	84	26	53	+8	42	51	+43	0.44	-0.26	0.62	-1.42
<u>St. Lawrence Valley</u>											
Canton	83	27	51	+7	31	33	+27	0.16	-0.54	0.88	-1.19
Massena	86	28	51	+7	35	43	+36	0.63	0.00	1.22	-0.73
<u>Great Lakes</u>											
Buffalo	82	31	53	+7	44	55	+41	0.51	-0.19	1.00	-1.08
Wales	84	29	52	+8	37	39	+33	0.74	-0.17	1.07	-1.74
Niagara Falls	82	30	53	+6	42	51	+35	0.47	-0.30	1.05	-1.30
Rochester	87	31	55	+8	53	66	+49	0.70	+0.07	1.01	-0.89
Watertown	86	24	52	+8	47	54	+47	0.62	+0.01	0.89	-0.92
<u>Central Lakes</u>											
Dansville	88	30	57	+11	57	72	+57	0.57	-0.13	0.97	-1.09
Geneva	87	30	53	+8	47	50	+38	0.78	+0.08	1.14	-0.99
Honeoye	87	28	54	+8	49	54	+41	0.69	-0.01	1.34	-0.82
Ithaca	87	32	55	+10	52	55	+47	0.60	-0.10	1.25	-0.87
Penn Yan	87	31	56	+10	57	69	+57	0.46	-0.24	0.91	-1.22
Syracuse	90	31	56	+9	57	69	+54	0.51	-0.29	0.76	-1.69
Warsaw	80	27	50	+8	36	39	+35	0.67	-0.17	1.13	-1.37
<u>Western Plateau</u>											
Hornell Almond Dam	85	28	52	+8	35	36	+30	0.69	+0.06	1.12	-0.82
Elmira	89	28	55	+9	48	62	+52	0.51	-0.12	0.83	-1.12
Franklinville	81	29	51	+9	30	30	+28	0.76	-0.02	1.43	-0.98
Jamestown	81	30	52	+9	36	36	+30	0.77	-0.14	1.13	-1.67
<u>Eastern Plateau</u>											
Binghamton	83	31	56	+11	50	58	+50	0.40	-0.36	0.94	-1.32
Cobleskill	84	29	55	+11	49	54	+47	0.98	+0.21	1.12	-1.30
Morrisville	81	28	53	+9	39	41	+36	0.56	-0.20	1.28	-0.95
Norwich	85	29	55	+10	37	37	+30	0.39	-0.40	0.98	-1.45
Oneonta	86	30	57	+13	51	53	+47	0.56	-0.28	1.47	-1.03
<u>Coastal</u>											
Bridgehamton	77	39	59	+12	65	76	+69	0.02	-0.89	0.48	-2.45
New York	85	50	65	+13	105	170	+122	0.42	-0.49	1.03	-1.73

^{1/} Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning

The information contained in this weekly release is obtained in cooperation with Cornell Cooperative Extension, USDA Farm Service Agency, the National Weather Service, Agricultural Weather Information Service and other knowledgeable persons associated with New York agriculture. Their cooperation is greatly appreciated.

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Weather Data for Week Ending Sunday, April 29, 2012

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}				
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm	
<u>Hudson Valley</u>												
Albany County AP	60	30	43	-8	0	87	+53	1.61	+0.91	2.97	+0.07	
Glens Falls AP	66	26	43	-7	3	64	+43	1.38	+0.65	2.69	-0.19	
Poughkeepsie AP	63	29	46	-6	4	112	+64	1.63	+0.74	2.07	-1.31	
<u>Mohawk Valley</u>												
Boonville	52	20	34	-12	0	33	+17	1.85	+0.80	3.10	-1.38	
<u>Champlain Valley</u>												
Plattsburgh Int AP	54	28	41	-8	0	51	+28	1.60	+0.93	2.22	-0.49	
<u>St. Lawrence Valley</u>												
Canton	55	25	38	-10	0	33	+15	1.36	+0.66	2.24	-0.53	
Massena	54	26	39	-10	0	43	+22	1.23	+0.61	2.45	-0.12	
<u>Great Lakes</u>												
Buffalo Int AP	61	28	41	-10	0	55	+23	1.44	+0.74	2.44	-0.34	
Wales	58	23	37	-11	0	39	+21	1.61	+0.77	2.68	-0.97	
Niagara Falls	59	25	40	-11	0	51	+14	2.02	+1.32	3.07	+0.02	
Rochester NY	62	27	40	-11	0	66	+27	1.85	+1.22	2.86	+0.33	
Watertown Intl	63	21	38	-10	0	54	+34	0.93	+0.31	1.82	-0.61	
<u>Central Lakes</u>												
Dansville AP	67	24	41	-10	1	73	+39	0.82	+0.15	1.79	-0.94	
Geneva Research	56	27	39	-11	0	50	+20	1.37	+0.67	2.51	-0.32	
Honeoye	59	24	39	-11	0	54	+23	1.38	+0.68	2.72	-0.14	
Ithaca Cornell Univ.	64	25	38	-11	0	55	+32	1.93	+1.23	3.18	+0.36	
Penn Yan	66	27	40	-10	0	69	+39	0.99	+0.29	1.90	-0.93	
Syracuse	60	26	41	-10	0	69	+32	1.34	+0.57	2.10	-1.12	
Warsaw	54	25	36	-11	0	39	+25	1.62	+0.85	2.75	-0.52	
<u>Western Plateau</u>												
Hornell Almond Dam	62	22	37	-12	0	36	+18	1.35	+0.71	2.47	-0.11	
Elmira	67	22	40	-11	2	64	+37	0.83	+0.17	1.66	-0.95	
Franklinville	62	22	37	-9	0	30	+21	1.88	+1.11	3.31	+0.13	
Jamestown 4NE	62	25	39	-8	0	36	+19	2.29	+1.39	3.42	-0.28	
<u>Eastern Plateau</u>												
Binghamton/Broo	55	26	38	-12	0	58	+34	1.72	+0.95	2.66	-0.37	
Cobleskill	55	26	40	-9	0	54	+34	1.81	+1.04	2.93	-0.26	
Morrisville	54	23	36	-12	0	41	+24	2.24	+1.47	3.52	+0.52	
Norwich	55	23	38	-11	0	37	+16	1.81	+0.97	2.79	-0.48	
Oneonta	64	26	43	-5	0	53	+36	1.62	+0.74	3.09	-0.29	
<u>Coastal</u>												
Bridgehamton	61	33	50	+1	14	90	+68	2.37	+1.46	2.85	-0.99	
New York LGA	63	41	52	-4	21	191	+105	2.16	+1.25	3.19	-0.48	

^{1/} Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning

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Weather Data for Week Ending Sunday, May 6, 2012

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}				
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm	
<u>Hudson Valley</u>												
Albany County AP	78	29	54	+2	36	123	+57	1.23	+0.52	4.20	+0.59	
Glens Falls AP	74	25	51	-1	23	87	+41	0.87	+0.10	3.56	-0.09	
Poughkeepsie AP	80	28	57	+4	58	170	+84	0.89	-0.08	2.96	-1.39	
<u>Mohawk Valley</u>												
Boonville	67	25	49	+1	19	52	+20	0.76	-0.24	3.86	-1.62	
<u>Champlain Valley</u>												
Plattsburgh Int AP	63	26	49	-2	15	66	+19	0.80	+0.16	3.02	-0.33	
<u>St. Lawrence Valley</u>												
Canton	70	24	51	+2	24	69	+30	1.05	+0.36	4.08	+0.62	
Massena	71	24	51	+1	26	69	+24	0.79	+0.23	3.24	+0.11	
<u>Great Lakes</u>												
Buffalo Int AP	82	34	57	+5	52	107	+45	0.81	+0.14	3.25	-0.20	
Wales	84	25	54	+5	44	83	+43	0.73	-0.09	3.41	-1.06	
Niagara Falls	82	30	54	+2	40	91	+22	0.55	-0.14	3.62	-0.12	
Rochester NY	82	30	56	+4	54	120	+47	0.50	-0.11	3.36	+0.22	
Watertown Intl	73	23	53	+4	38	92	+50	0.83	+0.25	2.65	-0.36	
<u>Central Lakes</u>												
Dansville AP	87	30	59	+7	70	143	+78	0.95	+0.32	2.74	-0.62	
Geneva Research	77	29	54	+2	42	92	+33	1.07	+0.41	3.58	+0.09	
Honeoye	87	26	57	+6	56	110	+50	1.49	+0.86	4.21	+0.72	
Ithaca Cornell Univ.	82	27	55	+5	50	105	+58	1.50	+0.80	4.68	+1.16	
Penn Yan	78	28	57	+6	60	129	+70	1.37	+0.71	3.27	-0.22	
Syracuse	77	31	57	+5	60	129	+58	1.08	+0.32	3.18	-0.80	
Warsaw	81	30	53	+5	40	79	+47	0.56	-0.21	3.31	-0.73	
<u>Western Plateau</u>												
Hornell Almond Dam	86	24	55	+6	57	93	+54	0.92	+0.29	3.39	+0.18	
Elmira	86	22	59	+8	74	138	+84	1.22	+0.55	2.88	-0.40	
Franklinville	84	23	54	+7	48	78	+55	0.57	-0.20	3.88	-0.07	
Jamestown 4NE	85	27	57	+9	62	98	+63	1.54	+0.68	4.96	+0.40	
<u>Eastern Plateau</u>												
Binghamton/Broo	79	29	56	+6	55	113	+64	1.30	+0.57	3.96	+0.20	
Cobleskill	75	28	52	+2	26	80	+37	0.81	+0.04	3.74	-0.22	
Morrisville	76	25	53	+4	42	83	+45	1.05	+0.28	4.57	+0.80	
Norwich	79	22	55	+5	49	86	+41	1.14	+0.33	3.93	-0.15	
Oneonta	80	26	57	+8	55	108	+71	0.74	-0.19	3.83	-0.48	
<u>Coastal</u>												
Bridgehamton	60	32	52	-1	18	108	+61	1.55	+0.64	4.40	-0.35	
New York LGA	75	47	58	-1	55	246	+106	1.34	+0.43	4.53	-0.05	

^{1/} Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning

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Weather Data for Week Ending Sunday, May 13, 2012

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}			
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm
<u>Hudson Valley</u>											
Albany County AP	79	37	58	+2	54	177	+66	1.57	+0.80	5.77	+1.39
Glens Falls AP	82	33	56	+3	46	133	+51	1.44	+0.63	5.00	+0.54
Poughkeepsie AP	80	38	59	+3	66	236	+98	0.46	-0.52	3.42	-1.91
<u>Mohawk Valley</u>											
Boonville	73	35	51	+1	23	75	+19	1.87	+0.89	5.73	-0.73
<u>Champlain Valley</u>											
Plattsburgh Int AP	75	30	55	+2	42	108	+25	0.58	-0.05	3.60	-0.38
<u>St. Lawrence Valley</u>											
Canton	75	35	53	+2	31	100	+30	1.30	+0.67	5.38	+1.29
Massena	77	34	56	+3	46	115	+35	0.97	+0.41	4.21	+0.52
<u>Great Lakes</u>											
Buffalo Int AP	73	46	59	+5	61	168	+65	0.68	-0.02	3.93	-0.22
Wales	73	39	55	+4	41	124	+53	0.47	-0.30	3.88	-1.36
Niagara Falls	76	46	59	+4	64	155	+41	1.70	+1.07	5.32	+0.95
Rochester NY	76	43	58	+3	58	178	+59	0.72	+0.15	4.08	+0.37
Watertown Intl	75	36	55	+3	44	136	+63	1.05	+0.47	3.70	+0.11
<u>Central Lakes</u>											
Dansville AP	81	37	59	+5	64	207	+100	0.64	+0.01	3.38	-0.61
Geneva Research	78	42	57	+4	52	144	+46	0.89	+0.26	4.47	+0.35
Honeoye	79	35	57	+3	51	161	+60	0.63	+0.02	4.84	+0.74
Ithaca Cornell Univ.	78	35	54	+2	37	142	+59	0.82	+0.12	5.50	+1.28
Penn Yan	79	42	57	+4	53	182	+84	0.88	+0.25	4.15	+0.03
Syracuse	80	41	59	+4	65	194	+77	1.63	+0.93	4.81	+0.13
Warsaw	76	39	55	+4	35	114	+54	0.56	-0.21	3.87	-0.94
<u>Western Plateau</u>											
Hornell Almond Dam	78	34	54	+2	33	126	+55	0.62	-0.01	4.01	+0.17
Elmira	79	33	56	+2	47	185	+93	0.77	+0.07	3.65	-0.33
Franklinville	76	35	55	+5	39	117	+72	0.50	-0.27	4.38	-0.34
Jamestown 4NE	76	35	55	+4	42	140	+78	0.83	-0.01	5.79	+0.39
<u>Eastern Plateau</u>											
Binghamton/Broo	76	37	56	+2	46	159	+72	1.08	+0.32	5.04	+0.52
Cobleskill	76	41	56	+3	44	124	+49	1.38	+0.60	5.12	+0.38
Morrisville	77	37	55	+2	39	114	+44	1.51	+0.69	6.00	+1.41
Norwich	77	35	55	+2	41	127	+48	1.13	+0.29	5.06	+0.14
Oneonta	78	36	56	+5	46	154	+87	1.18	+0.20	5.01	-0.28
<u>Coastal</u>											
Bridgehamton	74	42	57	+3	50	158	+75	2.27	+1.41	6.67	+1.06
New York LGA	79	51	62	+3	87	333	+122	0.63	-0.24	5.16	-0.29

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Weather Data for Week Ending Sunday, May 20, 2012

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}				
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm	
<u>Hudson Valley</u>												
Albany County AP	82	40	63	+6	93	270	+99	1.42	+0.65	7.19	+2.04	
Glens Falls AP	81	37	61	+5	74	207	+77	1.60	+0.76	6.60	+1.30	
Poughkeepsie AP	83	40	64	+6	101	337	+133	0.64	-0.34	4.06	-2.25	
<u>Mohawk Valley</u>												
Boonville	78	35	57	+4	51	126	+37	0.61	-0.37	6.34	-1.10	
<u>Champlain Valley</u>												
Plattsburgh Int AP	78	35	57	+2	54	162	+31	0.45	-0.18	4.05	-0.56	
<u>St. Lawrence Valley</u>												
Canton	80	36	58	+3	57	157	+46	0.17	-0.49	5.55	+0.80	
Massena	82	36	59	+3	62	177	+51	0.04	-0.52	4.25	+0.00	
<u>Great Lakes</u>												
Buffalo Int AP	82	40	62	+5	84	252	+94	0.01	-0.69	3.94	-0.91	
Wales	82	33	58	+4	60	184	+71	0.00	-0.79	3.88	-2.15	
Niagara Falls	83	37	60	+2	68	223	+51	0.11	-0.52	5.43	+0.43	
Rochester NY	82	38	60	+3	73	251	+73	0.00	-0.63	4.08	-0.26	
Watertown Intl	79	35	58	+4	59	195	+80	0.04	-0.59	3.74	-0.48	
<u>Central Lakes</u>												
Dansville AP	85	37	63	+7	93	300	+138	0.02	-0.61	3.40	-1.22	
Geneva Research	83	38	61	+5	79	223	+72	0.04	-0.62	4.51	-0.27	
Honeoye	85	34	62	+6	86	247	+92	0.02	-0.61	4.86	+0.13	
Ithaca Cornell Univ.	81	34	59	+4	69	211	+82	0.37	-0.40	5.87	+0.88	
Penn Yan	82	40	62	+5	83	265	+114	0.26	-0.40	4.41	-0.37	
Syracuse	84	39	62	+5	85	279	+102	0.05	-0.67	4.86	-0.54	
Warsaw	83	34	59	+6	65	179	+81	0.00	-0.77	3.87	-1.71	
<u>Western Plateau</u>												
Hornell Almond Dam	83	32	59	+4	62	188	+74	0.25	-0.44	4.26	-0.27	
Elmira	85	33	61	+5	75	260	+117	0.31	-0.40	3.96	-0.73	
Franklinville	83	30	57	+6	54	171	+95	0.03	-0.74	4.41	-1.08	
Jamestown 4NE	83	33	59	+5	63	203	+103	0.00	-0.89	5.79	-0.50	
<u>Eastern Plateau</u>												
Binghamton/Broo	80	40	60	+5	75	234	+98	1.32	+0.55	6.36	+1.07	
Cobleskill	79	35	60	+5	74	198	+78	1.65	+0.81	6.77	+1.19	
Morrisville	82	36	60	+5	69	183	+71	1.11	+0.27	7.11	+1.68	
Norwich	85	34	60	+5	69	196	+72	1.31	+0.47	6.37	+0.61	
Oneonta	84	36	62	+8	83	237	+131	1.46	+0.48	6.47	+0.20	
<u>Coastal</u>												
Bridgehamton	76	43	60	+4	73	231	+98	0.39	-0.45	7.06	+0.61	
New York LGA	81	55	67	+5	120	453	+153	0.53	-0.31	5.69	-0.60	

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