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New York Berry News

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CURRANT EVENTS

September 20, 2010. *Blueberry IPM Training,* Dallas, PA. News brief with details follows below.

October 18th – **29, 2010.** *Recycle Ag Plastic Containers free of Charge.* Various sites across the state. See news brief that follows for details.

October 19-21, 2010. *CleanSweepNY 2010 Fall Program* Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties. For more information: news brief below or 877-793-3769 Email: <u>info@cleansweepny.org</u> or visit their web site: <u>http://www.cleansweepny.org/</u>.

November 8-10, 2010: Southeast Strawberry Expo, Wyndham Hotel in Virginia Beach, VA. Workshops and farm tour on Nov. 8, educational sessions and trade show on Nov. 9-10. For more information, visit <u>www.ncstrawberry.com</u> or contact the NC Strawberry Association, 1138 Rock Rest Rd., Pittsboro, NC 27312, 919-542-4037, <u>info@ncstrawberry.com</u>. Exhibitor inquiries welcome.

December 7-9, 2010. *Great Lakes Fruit Vegetable and Farm Market EXPO*, DeVos Place Convention Center, Grand Rapids, Michigan. For more information: <u>http://www.glexpo.com</u>.

January 6-7, 2011. NARBA (North American Raspberry and Blackberry Growers Association) Annual Meeting, Savannah, GA. See news brief that follows for more information.

January 31 – February 3, 2011. *Mid-Atlantic Fruit and Vegetable Convention* at the Hershey Lodge in Hershey, PA. For more information visit <u>www.mafvc.org</u>.

February 8-11, 2011. *7th North American Strawberry Symposium.* Tampa, Florida. Details follow below.

June 22-26, 2011. *10th International Rubus and Ribes Symposium, Zlatibor, Serbia.* For more information contact: Prof. Dr. Mihailo Nikolic, Faculty of Agriculture, University of Belgr, Belgrade, Serbia. Phone: (381)63 801 99 23. Or contact Brankica Tanovic, Pesticide & Environment Research Inst., Belgrade, Serbia. Phone: (381) 11-31-61-773.

BLUEBERRY IPM TRAINING AT DYMONDS FARM AND FARM MARKET, LUZERNE COUNTY, PA

Cesar Rodriguez-Saona, Rutgers University and Kathy Demchak, PSU Dept. of Horticulture

For a second year, a workshop on blueberry pest identification and monitoring techniques is being offered by personnel from Rutgers University in cooperation with personnel from the Atlantic Blueberry Company and Penn State. The workshop will be held in Luzerne County at Dymonds Farm and Farm Market, owned by Ted and Tim Dymond.

Location: Dymonds Farm and Farm Market 352 Brace Road Dallas, PA 18612-6044

Date: Monday, September 20, 2010

Time: 1:00-4:45 pm

Workshop Description: The *Blueberry IPM Training Workshop* will provide growers and extension agents with general information on pest management practices in blueberries. Emphasis of the workshop will be placed on sampling and identification of insect pests and diseases. Admission is free. Handouts, refreshments and some seating will be provided, but we suggest you bring a folding chair if you have one for portions of the presentations.

Presenters

Cesar Rodriguez-Saona, Small Fruit Extension Specialist, Rutgers University Dean Polk, Fruit IPM Agent, Rutgers University Faruque Zaman, Research Associate, Rutgers University Gene Rizio, Fruit IPM Program Associate, Rutgers University Becky Gleason, IPM Coordinator, Atlantic Blueberry Company Ted Dymond, Dymonds Farm Market

Program	
Part I:	
1:00-1:15	Introduction : Speaker introductions, an overview of the Dymond's farming operation, project outline, workshop objectives and materials (Dymond, Rodriguez-Saona, Polk, and Zaman)
1:15-1:30	IPM Concepts : Principles of IPM and roles of scouting (Rodriguez-Saona and Zaman)
1:30-2:00	Sampling in Blueberries: Where and how to sample (Polk)
2:00-2:30	Common Blueberry Pests : What to look for (Rodriguez-Saona and Polk)
2:30-3:00	Break – Refreshments
Part II:	
3:00-4:10	Field Demonstration: Hands-on sampling in blueberries (Polk and Rizio)
4:10-4:45	"Ask a Grower": Opportunity to ask a New Jersey grower on implementation of sampling techniques (Gleason), and a Pennsylvania grower about challenges in upland blueberry production (Dymond)

Registration

Please register for this workshop by calling the Luzerne County extension office at 570-825-1701 by 4:30 p.m. on September 16th. Please provide your name, an email address or phone number where we may contact you if necessary, and tell us how many people from your operation plan to attend.

Directions to Dymonds Farm

The easiest way to get to Dymonds Farm from the East, North, or South is to get to the Wilkes-Barre vicinity, and take Route 309 North (Exit 170B). Stay on Route 309 North for approximately 11 miles and turn right onto Hildebrandt Road. If you go past the Country Club shopping center, you've gone too far. Once on Hildebrandt Road, take a slight left onto Upper Demunds Road, which will become Campground Hill Road, Edinger Road, and then Valley View Road

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Tree Fruit & Berry Pathology, NYSAES

over the course of 3.6 miles. Turn left onto Lake Louise Road, go 1.0 miles, turn right onto Orange Road for 0.1 miles, and then turn left onto Brace Road and go 0.8 miles.

From the West, take Route 118 East and turn right on Route 415 (Memorial Highway). Go 1.2 miles, and turn left onto Center Hill Road – Pickett's Charge restaurant is the landmark there. Go 0.6 miles and cross Route 309 onto Hildebrandt Road, and then follow directions as above.

Note from K. Demchak: Dymonds Farm is in a lovely location, but is a bit off the beaten path. You might want to allow extra time in case you miss a turn.

Sponsors: Costs of this workshop are defrayed by NE-SARE project LNE08-273 "Spatially Based Whole-Farm Integrated Crop Management (ICM) Systems for Northeast Highbush Blueberry Production".

RECYCLE AG PLASTICS CONTAINERS FREE OF CHARGE

Heath Eisele & Elizabeth Bentley Huber

SAg Recycling Inc. will be picking up agricultural plastic containers in several locations throughout New York State from October 18th - 29th. The service is **free** to farmers and provides an environmentally friendly alternative to burning or throwing away agricultural containers.

Farmers interested in recycling agricultural plastics should begin collecting plastic containers and taking steps to ensure they are dry, empty, and properly rinsed. Farmers who would like to participate should contact Elizabeth Bentley Huber, Genesee County Agricultural Environmental Management (AEM) Coordinator, to discuss quantities and possible pick up locations.

How do you make sure your containers are properly rinsed? First read the product label, then pressure rinse or triple rinse the container. The first step is to thoroughly rinse all residues from the containers immediately after use. Only dry, empty, properly rinsed containers are accepted at collection sites. For more information visit http://www.usagrecycling.com/rinse.html.

"Properly disposing of agricultural wastes is a component of the Agricultural Environmental Management Program," said Huber. "This effort will provide an outlet for farmers to dispose of agricultural plastics in an environmentally responsible manner, as well as to help protect ground and surface waters."

If you would like to recycle agricultural plastics from your farming operation or learn more about the program, please contact Elizabeth Bentley Huber with the Genesee County Soil and Water Conservation District at 585-343-2362.



CLEANSWEEP NY FALL PROGRAM SCHEDULED

lanning is underway for a fall 2010 CleanSweepNY collection event which will target Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties.

Farmers, owners of former farms, private and commercial pesticide applicators, greenhouses, nurseries, landscapers, schools, golf courses, cemeteries and marinas are welcome to participate in this pesticide/chemical disposal program. Also accepted for recycling are triple-rinsed HDPE (#2) plastic pesticide containers.

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Collection Dates and Locations:

Tuesday, October 19, 2010 Potsdam, NY – NYSDOT Facility 7280 US Route 11 Potsdam, NY 13676 Wednesday, October 20, 2010 Lowville, NY – NYSDOT Facility 5527 Bostwick Street Lowville, NY 13367 **Thursday, October 21, 2010** Herkimer, NY – NYSDOT Facility 131 Fifth Avenue Herkimer, NY 13350

Registration packets mailed out on request via US Post by contacting CleanSweepNY Staff: Telephone: 877-793-3769 Email: <u>info@cleansweepny.org</u>.

Registration Deadlines: September 24, 2010: Holders of Gas Cylinders and Unknown Chemicals **October 8, 2010**: All Others

COMMISSIONER REMINDS FARMERS TO ONLY SELL TO LICENSED DEALERS

Agricultural Producers Security Law Protects Farmers from Nonpayment

July 22, 2010. New York State Agriculture Commissioner Patrick Hooker today reminded farmers to only sell to licensed farm product dealers. This reminder highlights the provisions contained in Article 20 of the New York State Agriculture and Markets Law, more commonly known as the Agricultural Producers Security Law.

"The Department is able to offer financial protections to our producers in the event of nonpayment under the Agricultural Producers Security Law," the Commissioner said. "The catch is that farmers must make sure they are selling their products to a licensed dealer. It is also important that producers notify the Department immediately in order to preserve their rights under the law. Therefore, I recommend that all farmers become familiar with the details of the Agricultural Producers Security Law so they can be assured of their protections in a swift and effective manner." Farm product dealers are required to be licensed with the New York State Department of Agriculture and Markets. Dealers' licenses expire on April 30 of each year and must be renewed for the license year beginning May 1. The Department maintains a current list of licensed dealers on its website at

http://www.agmkt.state.ny.us/programs/apsf.html and can provide a hard copy upon request.

Article 20 of the New York State Agriculture and Markets Law provides financial protection for farmers against nonpayment for their products sold to licensed dealers. This financial protection consists of security in the form of a bond or letter of credit furnished by the dealer, and supplemental financial coverage from the Agricultural Producers Security Fund, which is funded by licensed dealers. In order to preserve a producer's eligibility for the financial protections available under the Agricultural Producers Security Law, producers must:

- 1. Sell only to licensed dealers. Only sales to licensed dealers are covered under Article 20. The dealer must be licensed at the time of the transaction.
- 2. Ensure that the sale of farm products between the producer and dealer, for which a claim is made, has occurred within 120 days from the earliest unpaid transaction date at the time the claim is filed. Unpaid transactions that occur after the 120 day period will not be eligible.
- 3. File claims of nonpayment with the Department no later than 365 days after the sale and delivery of the farm products. In the event the Department has issued a notice to file claims, they must be submitted by the date specified in the published notice without regard to the 365-day time frame.

A producer can also take advantage of Article 20's trust provision, a legal mechanism that holds a dealer responsible for the full amount owed to a producer. The "Article 20 Trust" is established upon delivery of the producer's farm products to a dealer and ends once the amount due is fully paid. The trust assets are the farm products and the proceeds from the sale of those farm products. To take advantage of the Article 20 Trust, a producer must provide a written notice to the dealer within 60 days from the date when payment is due informing the dealer that the producer is electing the trust benefit. The written notice must provide details of the transaction, including the dealer's name, transaction date, product sold, quantity, price per unit, amount owed and the date payment is due. As a practical matter, a producer may wish to provide written notice to a dealer on the invoice itself. The Department recommends that producers consult with their attorney concerning matters involving preservation of their trust benefit, or to enforce the trust.

For up-to-date information about the law, a copy of the brochure or a list of licensed dealers, please visit the Department's website at <u>http://www.agmkt.state.ny.us/programs/apsf.html</u>, or call the Department at 1-800-554-4501 or directly at 518-457-1954.

BEE PASTURES MAY HELP POLLINATORS PROSPER

Marcia Wood, ARS News Service, Agricultural Research Service, USDA (301) 504-1662, <u>marcia.wood@ars.usda.gov</u>

ugust 4, 2010. Beautiful wildflowers might someday be planted in "bee pastures," floral havens created as an efficient, practical, environmentally friendly, and economically sound way to

Lproduce successive generations of healthy young bees.

The pesticide-free pastures could be simple to establish, and--at perhaps only a half-acre each--easy to tend, according to U.S. Department of Agriculture (USDA) entomologist James H. Cane. He's based at the Pollinating Insects Biology, Management, and Systematics Research Unit operated by USDA's Agricultural Research Service (ARS) in Logan, Utah. ARS is USDA's principal intramural scientific research agency.



Bee pasturing isn't a new idea. But studies by Cane and his collaborators, conducted in a research greenhouse and at outdoor sites in Utah and California, are likely the most extensive to date. *Right: Entomologist James Cane examines wildflowers in a Logan, Utah, test plot. (Photo courtesy Peggy Greb.)*

Two bee businesses are already using the findings to propagate more bees.



The research indicates that species of pastured pollinators could include, for example, the blue orchard bee, *Osmia lignaria*. This gentle bee helps with pollination tasks handled primarily by the nation's premier pollinator, the European honey bee, *Apis mellifera*. Cane estimates that, under good conditions, blue orchard bee populations could increase by as much as four- to fivefold a year in a well-designed, well-managed bee pasture.

Cane and colleagues have studied wildflowers that might be ideal for planting at bee pastures in California. In particular, the team was interested in early-flowering annuals that could help bolster populations of blue orchard bees needed to pollinate California's vast almond orchards. *Left: Blue orchard bee on a California five-spot flower, Nemophila maculata. (Photo courtesy Jim Cane.)*

The research, funded by ARS and the Modesto-based Almond Board of California, resulted in a first-ever list of five top-choice, bee-friendly wildflowers for tomorrow's bee pastures in almond-growing regions. These pasture-perfect native California plants are: Chinese houses (*Collinsia heterophylla*), California five-spot (*Nemophila maculata*), baby blue eyes (*N. menziesii*), lacy or tansy phacelia (*Phacelia tanacetifolia*), and California bluebell (*P. campanularia*).

Cane has presented results of his research to almond growers at workshops.

Read more about the research in the August 2010 issue of Agricultural Research magazine, available online at: <u>http://www.ars.usda.gov/is/AR/archive/aug10/bee0810.htm</u>. This pollinator research supports the USDA priority of promoting international food security.



Second Announcement

7th North American Strawberry Symposium

Location - Doubletree Hotel Tampa Westshore Airport, Tampa, Florida, USA Dates – February 8-11, 2011

Invitations are extended to members of the strawberry research community in North America and around the world to attend the 2011 North American Strawberry Symposium.

The theme of this year's meeting is "Sustaining Strawberry Production Through Science." Topics for presentations will include: Global and North American Overviews, Breeding, Genetics, Molecular Biology, Disease & Pest Management, Propagation & Nursery Management, Cultural Practices, Plant Nutrition and Water Management, Plant Physiology, Economics of Production Practices, Post-Harvest, and Food Safety. Workshop topics include Water and Nutritional Management, Nursery propagation and production physiology and others.

To help us plan the program, **please submit presentation titles** by **30 August 2010**, indicating if yours is an oral or poster presentation.

There will be two and a half days of workshops, research presentations, poster sessions, a banquet, and other special events planned for February 8-10. There will be a post-conference tour to the Plant City/Dover area, where the majority of strawberries are grown in Florida, and to the University of Florida Gulf Coast Research and Education Center, a state-of-the-art facility devoted to strawberry research and education.

More program details (abstract deadlines, keynote speakers, etc.) and opportunities for industry, organization and agency sponsorship are available on the NASGA website: <u>http://www.nasga.org/</u> and from program committee members listed below.

Program committee:

David Handley, PhD Vegetable and Small Fruit Specialist University of Maine, Orono, Maine <u>dhandley@umext.maine.edu</u> Kirk Larson, PhD Pomologist and Strawberry Production Specialist University of California, Davis South Coast Res. & Ext. Center, Irvine, CA kdlarson@ucdavis.edu

Kim Lewers, PhD (Co-Chair) Research Geneticist (Plants) USDA-ARS, Beltsville, Maryland <u>kim.lewers@ars.usda.gov</u> Natalia Peres, PhD (Co-Chair) Plant Pathologist University of Florida Wimauma, FL nperes@ufl.edu

ORGANIC TRANSITION SURVEY RESULTS

40% of Surveyed Conventional Farmers Have Some Level of Interest in Organic

ugust 6, 2010. New York State Agriculture Commissioner Patrick Hooker announced the results of a survey that asked conventional farmers about their level of interest in transitioning to organic agriculture. The survey, conducted in conjunction with the New York Field Office of the National Agricultural Statistics Service, found that 40 percent of conventional farmers who responded to the survey have some level of interest in becoming involved in organic production.

"As organic food sales continue to expand in the marketplace, organic production continues to be an increasingly viable farm opportunity," the Commissioner said. "In order to better help our farming community, we needed to identify the level of interest, the perceived barriers to transition and the materials or services farmers are seeking. This survey was successful in providing us valuable information and will enable us to focus our efforts in areas that were identified as important in order to help those interested participate in this growing and exciting market."

The survey, the first of its kind in New York, found 6 percent of those surveyed have a high level of interest in organic production, while 15 percent have a moderate interest and 19 percent a slight interest. Sixty percent of respondents indicated that they have no interest in transitioning to organic farming. A copy of the entire survey report can be found at <u>http://www.agmkt.state.ny.us/AP/organic/</u>.

Kathie Arnold, Chair of the Organic Task Force, said, "This survey broadens our knowledge base as to the mindset of farmers as they consider opportunities provided by organic agriculture. With New York City's eaters providing one of the largest markets for organic food in the country, being able to identify and thus know how to address barriers to entry should allow more New York farmers to enter this expanding market. This, in turn, will help farmers meet the demands of our State's and region's markets with New York State grown organic produce, dairy, meats, and grains." The survey also found the number one barrier amongst those interested and not interested in organic production to be disease related production losses. Conventional farmers with an interest in organic production also indicated the need for a variety of information and services that would be useful in the transition. They include: directories of organic product buyers, organic-specific written production guidance, local/regional organic market development, organic consulting services, and university research on organic challenges. The top service indicated by organic and transitioning farmers was clearly on-going university research on organic challenges.

To assist organic producers and those interested in transitioning, the New York State Department of Agriculture and Markets, in cooperation with the New York State Integrated Pest Management (IPM) Program have recently developed 13 organic production guides, which address some of the barriers by providing some of the information and services identified in the survey. The guides, available for free at http://nysipm.cornell.edu/organic_guide/, provide information for farmers on how to produce a number of certified organic fruits and vegetables. They also list pests and diseases along with research-based methods of control and their effectiveness, highlighting production issues that remain a challenge to New York growers. In the last seven months, more than 24,000 copies of the guides have been downloaded; the apple guide receiving the largest number of downloads with 4,000.

New York State ranks among the top ten states in the country for the number of organic farms. In 2008, the U.S. Census identified 827 certified organic farms in New York State with nearly 168,400 total acres in production. The 2008 Census also found that 77 farms were transitioning another 2,806 acres to organic production.

In 2009, the Organic Trade Association reported organic sales of fruits and vegetables rose to more than 11 percent of all fruit and vegetable sales nationwide. While the rate of organic food sales has slowed significantly from 2008 to 2009, organic food sales still grew by 5.1 percent in 2009, while total U.S. food sales grew by only 1.6 percent.

SOUTHEAST STRAWBERRY EXPO PREVIEW & INFORMATION



Date: November 8-10, 2010

Location: Virginia Beach, VA. This is the first time the Strawberry Expo has been held outside of North Carolina. We are pleased to be coming to Virginia Beach, which great farms to tour, welcoming hosts, and lots of other attractions. These include the beach itself, fishing, <u>Colonial Williamsburg</u>, and more. Bring your family and consider coming early or staying on for a real vacation. For more information, contact the <u>VA Beach Visitors Bureau</u>.

Program: Additional details will be added as they are confirmed. Registration materials and fees will be available soon.

Monday November 8, Three concurrent workshops 9 am - Noon. Preregistration will be required.

- <u>Strawberry Plasticulture for Northern Growers and Colder Areas</u> is a very special workshop being offered by Dr. Barclay Poling of NC State University, focusing on the unique needs and issues of growers in those areas.
- <u>Strawberry Plasticulture for the Southeast</u> is a grower-lead workshop for novice or prospective growers, or those who just want a refresher, led by a team of experienced growers.
- **Insurance**, **Taxes**, **Risk**, **Family**, **Land**: Organizing your farm business to minimize taxes and health and liability insurance costs, protect family and farm assets, and get more sleep

<u>Monday Afternoon:</u> **Tour** of three farms in the Pungo area of Virginia Beach, Brookdale Farm (Tom and Ann Baker), Cullipher Farm Market, and the Winky Henley Farm, visiting fields, and seeing farm market facilities. All three farms market direct to the public and have varied marketing programs and multiple crops. The tour will conclude with dinner at a very special site, the <u>Military Aviation Museum</u>, with an entertaining speaker, Mr. John Parker, Executive Director, VA Pork Industry Board. Don't miss it! Charter buses from the hotel will take participants on the tour.

<u>Tuesday, November 9:</u> Tradeshow and educational sessions 9:00 am to 5:30 pm. General session includes grower spotlight (David and Lisa Schacht, Columbus Ohio) and Matt Lohr, VA Commissioner of Agriculture, who is also a family farmer raising sweet corn and pumpkins. Breakout session topics include

- New Recommendations for Disease Control
- Insect & Disease Management
- Using Weather Information
- Row Cover Management
- Farming on the Urban Fringe
- Fumigation (and non-fumigation) Best Management Practices
- Working with the Media
- Social Media (Facebook, etc.) for the Farm
- and more...

Dinner that evening is on your own. There are many excellent dining choices in Virginia Beach. A hospitality room at the hotel will be open for informal visiting and discussion.

<u>Wednesday, November 10:</u> Tradeshow and educational sessions 8:30 am to noon. Grower spotlight on Tracey and Shawn Harding, Southside Farms, Chocowinity, VA, and educational sessions on:



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- Coping with the New Fumigant Regulations (preregistration required)
- Cultivar Development Forum
- Understanding Your Plant Supply
- Working with Chefs
- Tools for Promotion: Roundtable discussion of Promotional Ideas

In the afternoon there will be a special Focus Group Discussion on Developing Crop Insurance for Strawberries (preregistration required). Additional activities may be planned.

Hotel: Our host hotel is the <u>Wyndham Virginia Beach Oceanfront</u>. The special Expo rate is only \$70/night plus tax. To make reservations, call **800-365-3032**. Be sure to mention "Strawberry Expo" to get our special rate. This rate is also good for several days before and after the Expo, if you wish to extend your stay. *Be sure to make your reservation by October 7.* While the hotel may honor the rate after that date, there is no guarantee that rooms will be available. We especially encourage you to make reservations early if you plan to come the weekend before, as another group will be competing for the space.

Hotel amenities include indoor and outdoor heated pools, private balconies or patios for all rooms, refrigerators, microwaves, and coffee makers, complimentary high-speed wireless Internet, a kids arcade-style game room, an oceanfront fitness center, and a local shuttle.

Travel: Virginia Beach is a 3.5 hour drive from Raleigh, 4.25 hours from Greensboro, and a little more than 5.5 hours from Charlotte. It's also 200 miles from Washington D.C. and only 250 miles from Philadelphia. If travelling by air, plan to fly to the Norfolk International Airport, served by many major airlines. It is a 20 minute drive to the Virginia Beach oceanfront. There is also an <u>airport shuttle</u>. The price of a one-way shuttle trip to the Virginia Beach Oceanfront is \$40. Additional persons in the same party are only \$5.00.

Registration: Full registration materials will be posted later this summer and will also be available by mail. Sponsor and Exhibitor inquiries are welcome. Email the <u>NC Strawberry Association</u> for more information or with any questions.

AGRO-ONE AUGUST UPDATE

Cathy Heidenreich, Berry Extension Support Specialist, Cornell University College of Agriculture and Life Sciences Department of Horticulture, Geneva Campus-NYSAES, 630 West North St, Geneva NY 14456

NAL's partner, <u>Agro-One Services</u>, now provides Cornell University's research-based nutrient recommendations. If you wish to receive fertilizer recommendations, please submit your soil sample and payment directly to Agro-One. Cost per soil test is \$10. Agro-One will honor previously purchased Cornell soil test bags but these bags are no longer available for sale.

Beginning this month, Agro-One also offers plant tissue testing (tree and small-fruit leaf and grape petiole analysis) and provides Cornell recommendations to growers. Cost per test for this service is \$24.

Please visit the <u>Agro-One website</u> to learn more about their services, <u>sampling instructions</u>, <u>submission forms</u>, and <u>pick-up locations</u> throughout the Northeast.

SUMMER 2010 BERRY UPDATE

Marvin Pritts, Professor and Chair, Cornell University College of Agriculture and Life Sciences Department of Horticulture, Ithaca Campus, 134A Plant Science Bldg., Ithaca, NY 14853

n mid-July, a group of extension educators and faculty from the New England states met in Burlington, VT to tour organic farms and learn about some new methods of growing berry crops and managing pests.



One grower had mastered the use of a flex tine harrow for eliminating weeds from a first-year strawberry planting. The key was getting plants in early so they would root before the weeds emerged. Then, the harrow could be used without pulling out the strawberry plants. The field was very clean. It did not have perennial weeds or rocks, so the tool worked well in the sandy soil.



Another grower is planting June-bearing strawberries into landscape fabric, removing the runners at the end of the year then covering the planting with a tunnel. After the first harvest, plants are renovated for a second year. This grower is receiving \$3.00 per pint for PYO organic strawberries with this system. He gets 2,000 lbs per 20 by 200 ft. tunnel.



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My concern is that this system is favorable for two-spotted spider mites and cyclamen mites (hot and dry with lots of dead leaf litter on the surface). Cleaning up the dead leaves after renovation (vacuum? leaf blower?) and perhaps removing the plastic covering after harvest would help.



Landscape fabric was also being used as a cover for blueberries, and it appeared to work well.

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We also saw a raspberry planting where every floricane was dead, but the primocanes appeared to be healthy. The variety 'Killarney' is resistant to Phytophthora root rot. We did not see cankers on the canes. 'Heritage' and 'Caroline' nearby were flowering. Our conclusion was that the planting experienced cold temperature injury. Laterals grew, but then succumbed once a fruit load and high temperatures ensued.



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In the meantime, our high tunnel blackberries in Ithaca are beginning to ripen, producing enormous fruits.



NATIONAL EXPANSION AND INNOVATIONS WITH ELDERBERRY PLANTINGS

Steven A. McKay, Fruit Extension Educator, Hudson Valley Regional Fruit Program, CCE Columbia County, 479 Route 66, Hudson, NY 12534

n June I had an opportunity to attend a meeting in Missouri on commercial plantings of elderberry in the US. A group of extension workers has been cooperating with growers for more than 10 years on selection of varieties, developing cultural practices and value-added products, and marketing. A group of producers is developing a coop, and there is a large commercial processor who is producing wine from fruit and flowers, as well as juice. I'd like to share some of the developments and information which continue to confirm the potential of this crop for development.

Varieties of elderberries have been evaluated from different parts of the country and the world. Researchers have found that the varieties respond uniquely to the environments where they grow. This means that they need to be tested in the sites where they are to be grown before large numbers are planted. An example is with the Adams varieties which were developed in New York. They perform beautifully in New York, but have problems where they were tested in Missouri. Researchers at Cornell are establishing some new variety trials where they will test plants from Europe and around the country to see how they perform.

US varieties are often selections from plants growing in the wild, or only removed a few generations from the wild. Researchers today look for plants in the wild that have abundant flowers, and appear to have heavy yields and desirable growth habits. The varieties most recently selected from the wild in Missouri are 'Wyldewood' and 'Bob Gordon'. They are very heavy yielders, efficient for harvest, and well suited to processing. We do not yet know how they might do in the Northeast.

In the U.S., commercial elderberries belong to one of two species, *Sambucus canadensis* (native American) or *Sambucus nigra* (European). The native American elderberries tend to send out runners, and quickly fill in a row with runners. European varieties don't tend to runner as easily. The reason we are interested in runners is to establish hedge rows of elderberry. With hedgerows, the plant may be machine harvested.

Machine harvest is desirable as labor becomes harder to find and manage. Scientists are trying to develop/select plants that can be cut to the ground in the winter by machine, and that will send up abundant new flowering shoots each year. It is also desirable that the fruits or flowers develop and are ripe at the same time so that one run through the orchard is possible with the machine.



Other **cultural practices** important to elderberry include, site management, propagation, fertilization, and irrigation. Site pH should be from 5.5 to 7.5, and soil should have high organic matter. The area should have good water and air drainage, and plants set three to five feet apart in rows ten to twelve feet apart. Plants are easily started from cuttings six to eight inches long with three to five buds placed in the field in the fall or early spring. They develop plants that could have a crop in the second year. About ½ pound of actual nitrogen per plant can be applied in a split application in May and June. Irrigation water is supplied at one inch per week, and attention must be given to weed control.

Pest problems are not extensive with elderberries. Mites are a big problem in the Midwest, but growers have found that hedgerow production, where plants are cut to the ground annually reduces the problem. I believe that cold winters in the East help control the pest. A borer sometimes attacks emerging flower stems and causes them to wilt and die before they even can open. Wildlife pests such as deer and birds can also take a toll on the plants.

Harvest/postharvest/value-added products are all important topics for elderberry production. Flowers can be harvested when fully open, and used to make tea or elderflower extract. Whole cymes, or clusters of fruit are harvested as they turn dark-colored. They are frozen and shaken to remove the berries. Whole berries are then stored frozen until ready to use. Jams, purees, wines, and juices are top value-added products made with elderberries. The products are desirable not only because of their flavor and beauty, but also for health benefits. Elderberries are high in antioxidants with an ORAC value of about 15,000 units as compared to blueberries that fall in the range of 4,000 units. Elderberries have been shown to be beneficial in stimulating the immune system, and fighting disease. They also have benefits for heart and circulatory health and protect cells from damage, which are benefits associated with high antioxidant foods. Please contact our office for more information on producing this crop.



OPTIMIZING STRAWBERRY PRODUCTION WITH A REDUCED TILLAGE SYSTEM



Laura McDermott, Regional Agricultural Specialist, Capital District Vegetable and Small Fruit Program of Cornell, Cornell Cooperative Extension-Washington County, 415 Lower Main St., Hudson Falls, NY 12839

This project, supported by a NESARE Partnership grant, seeks to address weed control during the establishment year of a perennial matted row strawberry system while also reducing cultivation and herbicide inputs and improving soil health.

Strawberry weed control, especially in the establishment year, remains a formidable barrier to achieving optimal productivity. In an effort to address this problem, strawberry growers in the northeast have been exploring alternative production systems. Some of these systems, like annual cropping of day-neutral berries, show great promise. Other systems, like plasticulture berries, have challenges with increased input costs, plastic mulch disposal, and control of

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runners. Biodegradable plastic, although useful, is not yet approved for organic production. Additionally, the biological nature of this product means that the rate of decomposition is somewhat unpredictable when used on certain soil types.

A recently completed (Nov. 2009), Cornell University project that focused on controlling weeds in strawberries during the establishment year by transplanting dormant berry plants into a killed cover crop showed great promise, but revealed a significant barrier. Most growers had difficulty planting through the cover crop. This resulted in slower establishment during the first month and possibly caused skips. Additionally, research has shown that control of weeds during the first weeks of the growing season makes the most difference to yield in a matted row system ¹. There have also been studies that support the use of cover crops as a way to decrease incidence of plant disease².

We are investigating whether using a reduced tillage approach will result in better weed control and less need for herbicides for establishment year matted-row, June-bearing strawberries while providing an excellent transplant zone. We will also observe if there is better drainage in compacted soils; improved vigor and yield during the first bearing year and a lower overall cost of production while working towards improving soil health.

The reduced-till system uses a sub-soiler to loosen soil deeply followed by coulters and a rolling basket that prepare a 6-10" wide seedbed. This technique allows the longer rooted strawberry plant to be correctly planted while still having minimum soil disturbance between the rows. By only tilling this narrow area, the chance of new weed seeds being brought to the surface for germination is reduced. Because the strawberry plants will get off to a good start, they should out-compete weed competitors in the tilled zone. The addition of the shank allows for improved water drainage therefore reducing disease pressure from soil borne diseases like Phytophthora fruit rot. The use of reduced tillage tools usually requires a single trip across a field for it to be fitted for planting – an important advantage that translates into less labor, reduced fuel consumption and a decreased risk of soil compaction.

Reduced soil erosion due to reduced tillage helps keep fertilizers and pesticides in the field where they can be utilized rather than ending up in surface or ground water. Soil erosion in a matted row system is only a concern during the establishment year and immediately after renovation. Soil structure can be improved in minimum till production systems by maintaining large soil aggregates which allow better water infiltration, improved root growth, oxygen exchange and improved soil microbial health. There is also potential for the Zone Builder to be used during the renovation of established beds as well, thereby increasing the utilization of the machine. The time and production costs saved using the reduced till system, along with the inherent advantages of planting into a killed cover crop will result in much greater adoption of reduced till in strawberry plantings. The fact that this implement can be used for many other crops on a diversified vegetable farm makes it even more attractive to growers.

There are three treatments in this study; conventional tillage, no-till and zone tillage.

- 1. Normal field prep done by farmer including fall tillage and rye cover crop planted in at the rate of 80#/acre along a 20' section of row, for 24 rows.
- 2. Plants were planted in spring 2010.
- 3. The first treatment would be the control, the cover crop is completely incorporated prior to planting and the entire 8 rows are fitted traditionally.
- 4. In the second set of 8 rows, treatment 2, berry plants were planted directly into the cover crop using transplanting equipment slightly modified for no-till.
- 5. For the third set of 8 rows, treatment 3, the Unverferth ripper/stripper created a 6" tilled zone in the cover crop and the berries will be planted in that zone.
- 6. In both treatment 1 and 2, rye was mowed later and higher to allow weed seeds to germinate and then was killed chemically. Plants were installed after cover crop was killed.
- 7. Weed population has been monitored during June 2010 and data will be taken in Sept 201 and June 2011.
- 8. Yield data will be gathered during June 2011.



This work is sponsored by NE SARE: <u>http://nesare.org/</u>

For more information about this project or other reduced till work, please contact Laura McDermott CCE Capital District Vegetable and Small Fruit Program 415 Lower Main Street Hudson Falls, NY 12839 518-746-2562 Igm4@cornell.edu

Unverferth Manufacturing: <u>http://www.unverferth.com/</u>

References:

¹Pritts, M.P. and Kelly, M.J. 2001. Early season weed competition reduces yield of newly planted matted row strawberries. HortScience 36:729-731.Pritts, M.P. and M.J. Kelly. 2001. Early season weed competition reduces yield of newly planted matted row strawberries. HortScience 36:729-731

² Seigies, A.T., Pritts, M.P., and Kelly, M.J. 2006. Cover crop rotations alter soil microbiology and reduce replant disorders in strawberry. HortScience 41:1303-1308

A TRAP CROP TO MANAGE DAMAGE FROM TARNIHSED PLANT BUG IN STRAWBERRY

Greg Loeb¹, Marvin Pritts², and Steve Hesler¹

¹Department of Entomology, Cornell University NYSAES, Geneva, NY, ²Department of Horticulture, Cornell University, Ithaca, NY

Tarnished Plant Bug (TPB): Relevant Biology

- 1. Key direct pest of strawberry
- 2. Two to three generations per year
- 3. Feeds on many weed and crop plants
- 4. Overwinters as adults, active in early spring
- 5. Attracted to flowering plants

Trap Crop Concept

Stands of plants that attract or in other ways intercept the pest are deployed near the focal crop thereby reducing pest abundance and damage

Winter Canola as a Trap Crop for TPB

- 1. Good host for TPB
- 2. Seed readily available
- 3. Flowers in spring before June-bearing strawberry

Research Objectives

1. Quantify TPB abundance and strawberry damage as affected by proximity to and management of winter canola







TPB Damage to Strawberry - 2009

2. Evaluate winter canola varieties to maximize attractiveness to TPB but minimize TPB performance



3. Quantify the benefits and costs associated with winter canola as a trap crop for commercial strawberry plantings in New York and Pennsylvania

AUGUST BERRY BAROMETER

HELPING TO KEEP YOU UP TO THE MARK!

Cathy Heidenreich, Berry Extension Support Specialist, Cornell University College of Agriculture and Life Sciences Department of Horticulture, Geneva Campus-NYSAES, 630 West North St, Geneva NY 14456

ALL BERRY CROPS:

- 1. Leaf Analysis Still time to get this done if you move on it now!
- **2.** Fertilization The window for fertilizing new transplants is closed for the season. Nothing further with the exception of late season N applications for strawberries. More on that in the next issue.
- **3.** Weeds Hand-weeding or spot applications to control weeds in new plantings through the end of this month. Gear up for fall applications by surveying plantings and recording weed species of concern.
- 4. **Diseases and Insects** –Stay the course- the end is in sight! Make applications promptly when environmental conditions are conducive to disease development/build-up or economic thresholds are exceeded for insect pests. Options for control of both may be found in the berry pest management guidelines (http://ipmguidelines.org/BerryCrops/).

STRAWBERRIES:

Established plantings:

1. **Diseases** – Recent humid weather has been great for PM development. Frequent (but sporadic) rains may promote development of leaf diseases (leaf spot, leaf scorch, and leaf blight) in new and renovated plantings. Protectant fungicide applications made to newly expanding leaves may be of some benefit in plantings with a history of leaf spot disease. Angular leaf spot, a bacterial disease of strawberry leaves, showed up early this season favored by overhead irrigation for frost protection. It has persisted well into summer and is now evident in new plantings. Bacterial ooze on lower leaf surfaces is rain-splashed onto new leaves where infections occur. Copper applications are the only alternative for this problem. Follow label instructions carefully to avoid phytotoxicity.

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- 2. **Insects** Potato Leaf Hoppers: young plants are most seriously affected by injury resulting in short petioles and small distorted leaves. Look for very active adults and nymphs by brushing foliage. Watch for leaf yellowing starting at the leaf margin and progressing toward the midvein.
- 3. **Weeds** Spot treatments, cultivation, hand-weeding for now followed by Dacthal, Sinbar, or Devrinol for winter annuals next month. September is also the time for thistle control using Stinger.
- 4. **Straw Mulch** –Be sure to secure sufficient straw to cover your planting. A general rule of thumb is 2-3 tons/acre, more if you are in a colder area with little snow cover or have plants on raised beds (4-5 tons/A). Be sure straw is glyphosate residue and weed-seed free!

New plantings:

1. **Plant establishment** –Continue to direct runner plants from aisles back into planting row area. Remove blossoms as they open to encourage good plant establishment and growth. Cultivate in mid-August then apply Dacthal (12 lb/A) for weed control.

BLUEBERRIES:

Established plantings:

- 1. **Soil pH** If your pH is still above 5.0 remember to schedule a late fall sulfur application (200 lb/A). The prilled form of sulfur takes a little longer to break down in the soil than the powdered formulation but tends to be more user-friendly to work with.
- 2. **Weeds** Hand –weeding and spot treatments.
- 3. **Diseases** –If anthracnose is a concern an application during harvest of Cabrio, Pristine, or Switch may be indicated. All three products have a 0 DTH and 12 hour REI.
- 4. **Insects** –Japanese beetle may be a concern.

New plantings:

- 1. **Soil pH** Same recommendations as for established plantings.
- 2. **Weeds** Hand –weeding and spot treatments.
- 3. Wildlife Watch for deer browse on new plants. Take immediate steps to deter feeding.

RASPBERRIES AND BLACKBERRIES:

Established plantings:

- 1. **Diseases** If weather is wet keep ripening fruit protected from gray mold.
- 2. Insects Insects of concern include Sap beetles, and Japanese beetle. Potato leaf hopper may also be a problem on raspberries, causing leaf yellowing from margin to midvein similar to that seen in strawberries.

New plantings:

1. **Plant establishment** – Keep weeds at bay with spot treatments and hand weeding.

CURRANTS AND GOOSEBERRIES:

New and Established plantings

- 1. **Diseases** Continue to watch for leaf diseases such as white pine blister rust (yellow-orange powdery spots), powdery mildew (white powdery spots), or leaf spots (black necrotic spots) on leaves. Be sure to check both upper and lower leaf surfaces.
- 2. **Insects** Postharvest insects of concern include Japanese beetles, and Two-spotted spider mites.

WEATHER NOTES (Courtesy NY NASS)

Week ending July 4th: Temperatures averaged below normal by as much as 5 degrees in several locations. The high for the week was 96 degrees while the low dipped to 42 degrees. Growing Degree accumulations since April 1st were above normal across the state. Precipitation totals ranged from none on Long Island to 1.87 inches at Boonville.

Strawberry season also came to a close in Albany County, but raspberries were coming out. Broome County strawberry operations ended, and pick-your-own blueberry operations began. A larger than normal crop of blueberries was expected. On Long Island, fruit was stressed due to the heat.

Week ending July 11th: Temperatures averaged above to well above seasonal levels statewide as a southwest flow around high pressure across the southeast states brought hot and increasingly humid weather to the region. Precipitation amounts were near to above average across central and western New York and below average across much of eastern New York and Long Island. Most of the rain fell Friday into Saturday as a slow moving cold front

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crossed the state from the west. Showers and thunderstorms preceded and accompanied this front with the areal coverage must numerous across western and central New York and isolated to scattered across eastern portions of the state.

Cayuga County blueberry and bramble harvests were in full swing.

Week ending July 18th: Temperatures were above average but relatively cooler than the previous week, as low pressure systems moved into the region cooling things down and produced much needed precipitation. Much of the rain fell towards the end of the week with showers and strong thunderstorms in the Mohawk Valley, with widespread showers and isolated thunderstorms in northern and southern areas of the state.

Week ending July 25th: Temperatures averaged from 2 to 9 degrees above normal. Highs ranged from 82 degrees in Boonville to 98 degrees in New York City. Growing degree accumulations were above normal across the state. Totals ranged from 1171 to 2413. All regions received rainfall. Amounts varied from 0.57 inches at Bridgehampton to 4.16 inches at Rochester. Totals were above normal in nearly all areas.

Capital area growers were finding bird damage in various crops, especially blueberries. Hail, wind, and driving rain affected fruit crops, especially apples and blueberries, in Franklin County. In the Lake Erie grape region, downy mildew was showing up in some Niagara and Delaware blocks.

Week ending August 1st: The week began with normal temperatures and dry conditions. As high pressure built offshore, warmer temperatures and increasing humidity spread across the region. By the middle of the week, temperatures were above normal. A strong cold front tracked through the region toward the end of the week produced around to just over an inch of rain in western and northern areas, but only a tenth to half inch in central and southern areas. After the cold front passed through, temperatures dropped to below normal and conditions dried out again.

Madison County raspberry growers were reporting a very good yield. In the Capital area, strawberry growers continued to deal with some post-renovation stress due to high temperatures.

Week ending August 8th: The week began dry with seasonable temperatures with high pressure over southeastern Canada and the northeast. The surface high moved off the New England coast by Tuesday with a return flow of warm and humid air. Temperatures surged above normal by the mid week with very humid conditions over New York. A cold front slowly moved across the state bringing showers and thunderstorms Wednesday into Thursday. The heavier showers and thunderstorms tended to be over the North Country. Cool Canadian high pressure brought dry weather back for Friday and Saturday, and temperatures slightly below normal. Overall, temperatures still averaged above normal for the week and precipitation was below normal for most locations. Some locations downwind of Lake Ontario and across Long Island did not get any precipitation for the week.

Questions or comments about the New York Berry News?

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Editor's Note: We are happy to have you reprint from the NYBN. Please cite the source when reprinting. In addition, we request you send a courtesy <u>E-mail</u> indicating NYBN volume, issue, and title, and reference citation for the reprint. Thank you.

Check out the NYSAES Tree Fruit and Berry Pathology web site at: <u>www.nysaes.cornell.edu/pp/extension/tfabp</u> *Cornell University provides equal program and employment opportunity.

	Temperature				Grov Day	ving De s (<i>Base</i>	gree 50)	Precipitation (inches)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley			•								
Albany	87	48	68	-3	129	1132	262	0.48	-0.30	7.83	-2.63
Glens Falls	86	47	66	-3	114	931	193	0.90	0.22	7.27	-2.87
Poughkeepsie	91	47	70	-1	145	1224	302	0.03	-0.87	5.41	-6.73
Mohawk Valley											
Utica	79	43	61	-4	78	722	167	1.87	0.90	13.08	-1.10
Champlain Valley											
Plattsburgh	91	52	67	-2	123	872	115	0.54	-0.15	8.10	-1.04
St. Lawrence Valle	y										
Canton	81	48	64	-3	102	897	243	1.46	0.69	10.90	1.35
Massena	86	49	66	-2	114	933	231	1.64	0.92	8.90	0.17
Great Lakes											
Buffalo	81	50	66	-5	111	1077	259	0.80	0.06	13.04	3.07
Colden	81	43	62	-5	87	862	220	0.89	-0.01	11.51	-0.51
Niagara Falls	83	48	67	-4	119	1117	284	1.35	0.66	10.14	0.26
Rochester	86	48	66	-3	114	1117	308	0.82	0.16	9.99	1.30
Watertown	79	46	65	-3	105	921	274	0.96	0.47	9.05	-0.89
Central Lakes											
Dansville	86	45	64	-5	100	1106	302	0.53	-0.28	9.80	-0.18
Geneva	86	51	67	-3	117	1075	293	0.73	-0.05	11.02	1.00
Honeoye	86	45	65	-5	109	1060	249	1.60	0.85	11.84	1.94
Ithaca	87	42	65	-3	105	982	278	0.79	-0.05	8.31	-2.16
Penn Yan	86	47	66	-3	117	1130	348	1.02	0.24	8.92	-1.10
Syracuse	85	51	67	-2	124	1155	337	0.78	-0.13	10.29	-0.63
Warsaw	82	44	63	-3	90	855	263	0.48	-0.41	14.24	2.61
Western Plateau											
Alfred	85	43	63	-2	96	943	365	0.80	-0.21	11.33	0.38
Elmira	88	42	65	-4	104	1052	300	0.68	-0.16	9.50	-0.63
Franklinville	84	40	61	-4	78	800	281	1.17	0.25	11.27	-0.31
Sinclairville	85	42	62	-4	87	922	322	0.82	-0.18	11.30	-1.57
Eastern Plateau											
Binghamton	84	46	66	-3	111	1070	344	0.52	-0.32	9.91	-0.66
Cobleskill	86	49	66	-1	111	909	239	0.12	-0.78	8.88	-2.74
Morrisville	85	46	64	-3	97	904	275	1.44	0.55	13.51	2.14
Norwich	87	43	63	-4	93	876	208	0.85	-0.03	11.34	-0.34
Oneonta	86	46	65	-1	104	929	317	0.60	-0.34	10.59	-1.92
Coastal											
Bridgehampton	88	54	72	4	159	1140	367	0.00	-0.74	6.19	-5.60
New York	96	64	79	6	207	1673	487	0.02	-0.86	7.12	-4.58

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00 AM, July4th, 2010

	Temperature				Grov Day	ving Deg s (<i>Base</i>	gree <i>50</i>)	Precipitation (inches)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley											
Albany	96	60	81	10	218	1350	329	0.30	-0.42	8.13	-3.05
Glens Falls	95	54	78	10	201	1132	257	0.39	-0.24	7.66	-3.11
Poughkeepsie	102	56	81	9	215	1439	366	0.60	-0.31	6.01	-7.04
Mohawk Valley											
Utica	89	59	74	10	173	895	231	0.24	-0.67	13.32	-1.77
Champlain Valley											
Plattsburgh	97	62	80	11	209	1081	185	0.35	-0.28	8.45	-1.32
St. Lawrence Valley											
Canton	91	60	78	11	194	1099	321	0.94	0.23	11.30	1.04
Massena	93	62	79	11	207	1140	307	0.89	0.19	9.79	0.36
Great Lakes											
Buffalo	92	62	77	7	189	1266	303	0.48	-0.20	13.52	2.87
Colden	88	56	74	7	167	1029	268	0.80	-0.04	12.31	-0.55
Niagara Falls	92	59	77	8	193	1310	333	0.47	-0.16	10.61	0.10
Rochester	94	59	78	9	200	1317	370	1.26	0.65	11.25	1.95
Watertown	90	60	77	10	191	1112	339	1.11	0.69	10.16	1.58
Central Lakes											
Dansville	93	56	76	6	182	1288	345	1.14	0.41	10.94	0.23
Geneva	93	62	78	9	198	1273	352	1.10	0.40	12.12	1.40
Honeoye	93	56	76	6	186	1246	290	2.06	1.40	13.90	3.34
Ithaca	94	56	77	9	188	1170	340	0.93	0.15	9.24	-2.01
Penn Yan	94	60	79	10	203	1333	412	1.40	0.70	10.32	-0.40
Syracuse	94	61	80	10	210	1365	408	0.67	-0.24	10.96	-0.87
Warsaw	90	57	74	9	172	1027	323	1.46	0.66	15.70	3.27
Western Plateau											
Alfred	92	55	75	10	178	1121	433	1.14	0.26	12.47	0.64
Elmira	97	54	77	9	194	1246	360	1.14	0.34	10.64	-0.29
Franklinville	92	52	73	8	158	958	335	1.57	0.72	12.84	0.41
Sinclairville	91	54	75	9	175	1096	383	1.00	0.08	12.30	-1.49
Eastern Plateau											
Binghamton	92	60	77	9	192	1262	405	0.28	-0.54	10.19	-1.20
Cobleskill	93	59	76	10	185	1094	301	0.47	-0.36	9.35	-3.10
Morrisville	94	58	76	9	182	1085	339	0.48	-0.36	13.33	1.12
Norwich	95	34	75	8	181	1057	266	0.36	-0.46	11.70	-0.80
Oneonta	94	57	77	11	188	1117	389	0.94	0.03	11.53	-1.89
Coastal											
Bridgehampton	100	61	80	10	214	1354	436	0.56	-0.14	6.75	-5.74
New York	103	73	86	11	256	1929	562	0.01	-0.90	7.13	-5.48

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 11th, 2010

	Temperature				Grov Day	ving Deg s (<i>Base</i>	gree <i>50</i>)	Precipitation (inches)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley			•								
Albany	91	65	78	7	199	1549	374	1.09	0.39	9.22	-2.66
Glens Falls	88	58	75	6	176	1308	293	1.59	0.96	9.25	-2.15
Poughkeepsie	95	63	79	8	207	1646	417	0.27	-0.64	6.28	-7.68
Mohawk Valley											
Utica	82	58	71	6	151	1043	267	1.42	0.55	14.71	-1.25
Champlain Valley											
Plattsburgh	90	62	75	5	176	1257	219	0.76	0.11	9.21	-1.21
St. Lawrence Valle	V										
Canton	86	58	73	5	167	1266	359	1.39	0.64	12.69	1.68
Massena	89	55	76	7	183	1323	354	1.60	0.90	11.39	1.26
Great Lakes											
Buffalo	88	65	77	6	190	1456	346	0.01	-0.63	13.53	2.24
Colden	86	57	73	5	160	1189	303	0.15	-0.62	12.46	-1.17
Niagara Falls	87	61	77	6	190	1500	376	0.00	-0.62	10.61	-0.52
Rochester	89	64	76	6	185	1502	412	0.13	-0.43	11.38	1.52
Watertown	89	57	75	7	179	1291	385	0.41	0.01	10.57	1.59
Central Lakes											
Dansville	88	59	73	4	165	1453	368	0.80	0.12	11.74	0.35
Geneva	88	63	75	5	179	1452	387	1.85	1.21	13.97	2.61
Honeoye	89	60	74	4	173	1419	313	0.57	-0.05	14.47	3.29
Ithaca	91	59	74	6	168	1339	376	0.10	-0.67	9.82	-2.20
Penn Yan	88	63	75	5	175	1508	443	0.86	0.22	11.18	-0.18
Syracuse	91	63	78	8	199	1564	463	0.20	-0.64	11.16	-1.51
Warsaw	86	60	72	6	158	1185	363	0.08	-0.69	15.78	2.58
Western Plateau											
Alfred	87	58	73	7	162	1283	481	0.82	0.02	13.29	0.66
Elmira	91	56	74	4	169	1415	389	0.09	-0.68	10.73	-0.97
Franklinville	86	56	71	6	150	1108	379	0.34	-0.46	13.18	-0.05
Sinclairville	88	56	73	7	162	1258	426	0.53	-0.38	12.83	-1.87
Eastern Plateau											
Binghamton	90	61	75	6	175	1437	446	0.20	-0.57	10.39	-1.77
Cobleskill	87	55	75	8	175	1269	350	2.30	1.53	11.65	-1.57
Morrisville	86	58	73	6	161	1246	378	1.30	0.51	14.63	1.63
Norwich	90	54	73	6	165	1222	305	0.91	0.14	12.61	-0.66
Oneonta	88	58	74	8	173	1290	443	1.68	0.77	13.21	-1.12
Coastal											
Bridgehampton	89	69	79	8	204	1558	487	1.70	1.05	8.45	-4.69
New York	95	73	83	8	234	2163	610	1.52	0.58	8.65	-4.90

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 18th, 2010

	Temperature				Grov Day	wing Deg s (<i>Base</i>	gree 50)	Precipitation (inches)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley			•								
Albany	89	62	75	4	178	1727	397	1.49	0.79	10.71	-1.87
Glens Falls	90	55	72	2	153	1461	306	0.98	0.28	10.23	-1.87
Poughkeepsie	95	62	78	6	200	1846	456	0.52	-0.37	6.80	-8.05
Mohawk Valley											
Utica	82	58	68	2	128	1171	276	2.34	1.44	17.05	0.19
Champlain Valley											
Plattsburgh	84	58	71	2	151	1408	224	1.78	1.07	10.99	-0.14
St. Lawrence Valle	V										
Canton	83	59	70	2	145	1411	371	1.38	0.61	14.07	2.29
Massena	85	61	73	4	160	1483	374	0.59	-0.11	11.98	1.15
Great Lakes											
Buffalo	83	66	75	4	178	1634	370	2.57	1.87	16.10	4.11
Colden	84	59	72	5	156	1345	333	1.44	0.67	13.90	-0.50
Niagara Falls	88	63	76	6	185	1685	409	1.65	1.02	12.26	0.50
Rochester	85	61	75	5	177	1679	442	4.16	3.54	15.54	5.06
Watertown	83	59	72	4	157	1448	409	0.93	0.51	11.50	2.10
Central Lakes											
Dansville	85	62	74	4	167	1620	388	2.38	1.75	14.12	2.10
Geneva	85	64	74	4	170	1622	410	2.14	1.51	16.11	4.12
Honeoye	85	62	74	3	170	1589	329	2.76	2.18	17.23	5.47
Ithaca	87	56	73	5	163	1502	406	1.97	1.20	11.79	-1.00
Penn Yan	86	65	75	5	178	1686	474	2.09	1.46	13.27	1.28
Syracuse	88	65	76	6	181	1745	497	3.35	2.51	14.51	1.00
Warsaw	84	61	71	5	149	1334	393	1.71	1.00	17.49	3.58
Western Plateau											
Alfred	86	61	74	7	168	1451	530	2.34	1.57	15.63	2.23
Elmira	92	58	76	7	182	1597	431	1.46	0.74	12.19	-0.23
Franklinville	87	56	71	7	155	1262	421	1.64	0.87	14.82	0.82
Sinclairville	91	62	74	8	174	1432	481	3.48	2.62	16.31	0.75
Eastern Plateau											
Binghamton	87	60	74	5	170	1607	476	2.28	1.51	12.67	-0.26
Cobleskill	86	60	72	4	154	1423	377	1.07	0.30	12.72	-1.27
Morrisville	84	59	72	5	157	1403	409	2.41	1.64	17.04	3.27
Norwich	88	58	72	4	158	1380	332	1.63	0.89	14.24	0.23
Oneonta	88	61	74	7	166	1456	490	0.99	0.14	14.20	-0.98
Coastal											
Bridgehampton	92	66	78	7	199	1757	532	0.57	-0.07	9.02	-4.76
New York	98	76	85	9	250	2413	672	0.83	-0.09	9.48	-4.99

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 25th, 2010

		Temp	erature		Grov Day	ving De s (<i>Base</i>	gree 50)	Precipitation (<i>inches</i>)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley			v								
Albany	88	50	71	-2	150	1877	393	0.00	-0.73	10.71	-2.60
Glens Falls	87	42	67	-4	120	1581	286	0.12	-0.61	10.35	-2.48
Pouahkeepsie	91	51	73	0	161	2007	456	0.01	-0.83	6.81	-8.88
Mohawk Valley											
Utica	80	45	64	-3	99	1270	261	0.45	-0.47	17.50	-0.28
Champlain Valley											
Plattsburgh	87	46	67	-4	120	1528	204	0.03	-0.76	11.02	-0.90
St. Lawrence Valley	V										
Canton	83	45	65	-4	107	1518	347	0.37	-0.45	14.44	1.84
Massena	85	44	66	-4	114	1597	353	0.06	-0.71	12.04	0.44
Great Lakes											
Buffalo	83	58	70	-1	144	1778	366	0.11	-0.66	16.21	3.45
Colden	84	52	66	-2	114	1459	321	0.36	-0.44	14.26	-0.94
Niagara Falls	85	58	71	-1	145	1830	407	0.41	-0.28	12.67	0.22
Rochester	88	57	71	0	146	1825	447	0.14	-0.52	15.68	4.54
Watertown	83	48	67	-2	124	1572	400	1.10	0.59	12.60	2.69
Central Lakes											
Dansville	85	53	67	-4	124	1744	368	0.94	0.31	15.06	2.41
Geneva	86	55	69	-3	133	1755	396	0.08	-0.55	16.19	3.57
Honeoye	83	54	69	-4	132	1716	304	0.30	-0.33	17.53	5.14
Ithaca	85	48	67	-2	122	1624	395	0.14	-0.62	11.53	-2.02
Penn Yan	87	53	70	-1	144	1830	471	0.17	-0.46	13.44	0.82
Syracuse	89	51	71	1	149	1894	500	0.06	-0.76	14.57	0.24
Warsaw	82	52	66	-1	117	1451	391	0.77	0.00	18.26	3.58
Western Plateau											
Alfred	85	53	67	2	123	1574	534	1.16	0.39	16.79	2.62
Elmira	89	49	69	-2	134	1731	425	1.48	0.78	13.67	0.55
Franklinville	83	50	65	0	109	1371	422	1.30	0.49	16.12	1.31
Sinclairville	86	52	67	1	124	1556	486	0.85	-0.06	17.16	0.69
Eastern Plateau											
Binghamton	85	50	69	-2	131	1738	471	0.24	-0.53	12.91	-0.79
Cobleskill	85	47	68	-1	126	1549	377	0.17	-0.59	12.89	-1.86
Morrisville	84	48	67	-1	121	1524	405	0.05	-0.72	17.09	2.55
Norwich	85	45	66	-3	112	1492	317	0.06	-0.64	14.30	-0.41
Oneonta	85	48	67	0	122	1578	493	0.00	-0.84	14.20	-1.82
Coastal											
Bridgehampton	89	58	73	1	164	1921	539	0.08	-0.62	9.10	-5.38
New York	93	67	81	4	217	2630	699	0.16	-0.75	9.64	-5.74

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 1st, 2010

		Temp	erature		Grov Day	wing Deg s (<i>Base</i>	gree <i>50</i>)	Precipitation (inches)			
	High	Low	Avg	DFN ¹	Week	YTD ²	DFN	Week	DFN	YTD	DFN
Hudson Valley											
Albany	91	54	75	4	179	2056	421	0.10	-0.67	10.81	-3.27
Glens Falls	88	48	72	3	154	1735	305	0.39	-0.39	10.74	-2.87
Poughkeepsie	92	55	76	4	180	2187	480	1.25	0.41	8.06	-8.47
Mohawk Valley											
Utica	82	47	67	2	120	1390	269	1.32	0.32	18.82	0.04
Champlain Valley											
Plattsburgh	91	48	71	2	149	1677	217	2.83	1.95	13.85	1.05
St. Lawrence Valley	V										
Canton	85	47	69	2	135	1653	356	1.21	0.32	15.65	2.16
Massena	87	50	71	3	149	1746	371	1.97	1.17	14.01	1.61
Great Lakes											
Buffalo	85	53	74	4	165	1943	385	0.16	-0.71	16.37	2.74
Colden	85	47	69	2	134	1593	332	0.35	-0.49	14.61	-1.43
Niagara Falls	88	52	74	4	172	2002	434	0.08	-0.72	12.75	-0.50
Rochester	88	51	73	4	163	1988	473	0.45	-0.28	16.13	4.26
Watertown	86	45	73	5	160	1732	429	0.03	-0.60	12.63	2.09
Central Lakes											
Dansville	87	51	71	2	147	1891	375	0.62	-0.07	15.68	2.34
Geneva	88	53	72	3	157	1912	412	0.34	-0.32	16.53	3.25
Honeoye	88	50	72	2	157	1873	314	0.43	-0.25	17.96	4.89
Ithaca	88	51	72	4	155	1779	420	0.68	-0.09	12.21	-2.11
Penn Yan	88	53	73	4	159	1989	489	0.35	-0.31	13.79	0.51
Syracuse	90	54	75	5	174	2068	534	0.58	-0.19	15.15	0.05
Warsaw	83	46	69	3	133	1584	410	0.45	-0.36	18.71	3.22
Western Plateau											
Alfred	86	51	70	5	144	1718	565	0.60	-0.17	17.39	2.45
Elmira	88	51	71	3	152	1883	442	0.37	-0.33	14.04	0.22
Franklinville	84	48	68	4	130	1501	447	0.65	-0.19	16.77	1.12
Sinclairville	85	52	70	5	145	1701	514	0.64	-0.30	17.80	0.39
Eastern Plateau											
Binghamton	87	54	72	4	154	1892	492	0.11	-0.65	13.02	-1.44
Cobleskill	88	49	71	4	148	1697	399	0.60	-0.17	13.49	-2.03
Morrisville	85	50	70	3	140	1664	426	0.75	-0.02	17.84	2.53
Norwich	88	49	70	3	143	1635	334	0.58	-0.12	14.88	-0.53
Oneonta	87	51	71	5	147	1725	523	1.21	0.37	15.41	-1.45
Coastal											
Bridgehampton	90	58	76	5	181	2102	566	0.00	-0.72	9.10	-6.10
New York	93	71	81	5	221	2851	732	0.01	-0.85	9.65	-6.59

NY NASS WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 8th, 2010