New York Berry News

CORNELL UNIVERSITY

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Wet weather seems to be the order of the day as Fall approaches. Check out the weather reports to see how your area has been fairing in terms of precipitation. Keep those boots and raincoats handy, looks like there's more to come!

In the line up this month we have new educational opportunities in both the calendar and news briefs, including a Southern Tier regional high tunnel meeting, a new Haygrove high tunnel on the market for smaller operations, sneak previews of the programs for both the 2007 NABGA's and NY Farmers Direct Marketing conferences, reminders for the fall 2006 CleanSweep program and Cornell Raspberry High Tunnel Open House, and more.

In-depth articles this month include good news! A new fruit pathologist has been hired at Geneva to fill Bill Turechek's former position. Kerik Cox came on board September 1 from Clemson State University.

Kevin Iungerman has provided an in depth discussion of strawberry dormancy for our information, along with a new slant on temporary labor from Steven McKay. Our list is rounded out with answers to a berry good question on fall slug management in strawberries, by Kathy Demchak.

CURRANT EVENTS

September 30- October 8. **New York Harvest for New York Kids Week.** For ideas visit: http://www.nyfarms.info/farmtoschool.html or http://www.prideofny.com/farm_to_school.html or http://farmtoschool.cce.cornell.edu/

October 6-7. **U.S. Highbush Blueberry Council Fall Meeting**, Regency, Bar Harbor, Maine. For more information: 207-288-9723.

October 10. **Commercial Preparation of Jams and Jellies for Retail Market**, CCE Dutchess County Home and Farm Center, Millbrook, New York. For more information http://www.nysaes.cornell.edu/necfe/nande/workshops.html.

October 10-12. **Advancing Renewable Energy Conference**, America's Center, St. Louis, Missouri. For more information: 1-877-448-3976 or http://www.technologyforums.com/6EN/index.asp.

November 8-10: **Great Lakes Fruit Workers Meeting**, Ithaca, NY . For more information,

November 9-11: **Southeast Strawberry Expo**, Sea Trail Conference Center, Sunset Beach, NC. For more information, call 919-542-3687, email ncstrawberry@mindspring.com, or visit www.ncstrawberry.com.

December 5-7.- **Great Lakes Fruit, Vegetable and Farm Market Expo**, DeVos Place, Grand Rapids, Michigan. For more information: http://www.glexpo.com .

January 16-17, 2007**. NABGA National Bramble Conference,** Columbus, Ohio, in association with the Ohio Fruit & Vegetable Congress. For more information: http://www.raspberryblackberry.com.

CORRECTION!

New England Vegetable and Berry Conference. This meeting is held every other year and will be held next year, not this year on December 11-13, **2007**. For more information: www.nevbc.org .

HIGH TUNNEL FIELD DAY SET FOR OCTOBER 17th

Cornell Cooperative Extension of Delaware County will be hosting a field day on high tunnels at their Resource Center in Hamden, October 17, 10:00 a.m.-2:00 p.m. This event is being funded by the New York Farm Viability Institute grant for high tunnel research being conducted at Cornell and in Delaware, Chemung, Tioga, Schuyler, and Yates counties, with Cornell Researchers, Extension Educators, and cooperating growers.

Kathy Scullion, Ed McGee and farm dog Bouzouki by their 21' x 60' Ledgewood Farm High tunnel – Indigo Hill Farm, DeLancey, New York

High tunnels are essentially unheated greenhouses that use roll-up sides for ventilation and cooling. They protect plants from weather extremes, extend the season by as much as ten weeks, increase crop productivity and quality, and reduce the need for pesticides by controlling moisture with inexpensive irrigation systems. Most growers plant crops right into the ground. Some use raised beds.

Marvin Pritts, Cornell Berry Specialist, will discuss research he has been doing at Cornell on growing fall bearing raspberries in high tunnels. In the afternoon the class will travel to Indigo Hill Farm in DeLancey to see a 21 x 60 Ledgewood Farm high tunnel that is growing raspberries, tomatoes, and herbs. Owned by Kathy Scullion and Ed McGee, this farm is participating in Cornell's high tunnel project being funded by the New York Farm Viability Institute, Inc. Professor Pritts will discuss the raspberry cultivars being grown at Indigo Hill Farm inside the tunnel and out in the field.

Rob Hastings of Rivermede farm in Keene Valley will discuss cropping styles for high tunnel fruit production, high tunnel construction and the pitfalls to avoid, and what to look for when you buy a high tunnel. Rivermede has high tunnels, greenhouses and multi-bay tunnels. They grow raspberries, strawberries, tomatoes, cut flowers and herbs in high tunnels.

Growers and dairy farmers interested in adding a high tunnel to their operation, as well as homeowners interested in learning about high tunnels, are invited to attend this field day. There is a $10.00 per person fee that will cover the costs of a light luncheon and handouts. Please send a check made payable to Cornell Cooperative Extension, P.O. Box 184, Hamden, NY 13782.

For more information contact: Janet Aldrich, 607-865-5631; jla14@cornell.edu.

HAYGROVE INTRODUCES SOLO TUNNELS

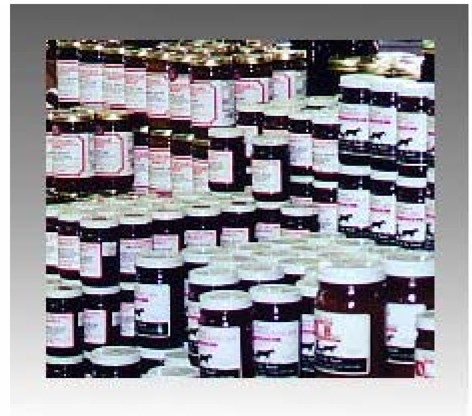
August 22, 2006. Haygrove Tunnels has just introduced the Solo single-bay high tunnel to the North American market. Solos are a great addition to Haygrove's line of multi-bay tunnels because they are perfect for both small growers and large growers who need single bays. They can be built either as a single unit or linked together in a multi-unit format with a narrow walkway between tunnels.

Solos seal up well to keep crops warm when the temperatures are low and vent well to keep crops cool when temperatures are high. Using the same rope lacing system as the Haygrove multi-bay tunnels, Solos vent much higher than other single-bay tunnels.

They offer more advantages than just better venting. Solos don't require a level site and less construction time is required. They can be dismantled and moved with the crop rotation if necessary. Solos are priced as a complete package, including poly and wide roll-up doors - there is nothing else to buy.

The biggest advantage is price. Solos provide twice the square footage for approximately the same price as other single-bay tunnels. They are available in two sizes, 24' x 200' and 28' x 200', shipped from Pennsylvania. Other sizes are available if an acre or more of coverage is needed. Learn more about Solos by calling 866-HAYGROVE.

COMMERCIAL PREPARATION OF JAMS & JELLIES FOR RETAIL MARKET WORKSHOP



This hands-on food processing workshop is being offered at the Dutchess County Cooperative Extension in Millbrook, NY on Tuesday October 10, 2006. Dr. Olga Padilla-Zakour, Director of the NYS Food Venture Center will be teaching both days.

This training is designed to provide current and future small processors with the basic elements needed to understand the main processing steps, critical control points and record keeping to safely manufacture specialty preserves for the marketplace. We will provide both technical information and practical training by demonstrating the production of fruit jam and low-sugar jelly. The cost is $50 per person; fee includes materials and lunch.

View the brochure and registration form at http://www.nysaes.cornell.edu/necfe/nande/workshops.html or call Bob Weybright at 845-677-8223 ex 122, email: rw74@cornell.edu or Nancy Halas at 845-677-8223 ex 115; email nh26@cornell.edu for more information.

EPA HOLDS PUBLIC MEETING TO DISCUSS GHS CLASSIFICATION AND LABELING OF CHEMICALS

On Wednesday and Thursday, October 18-19, 2006, EPA's Office of Pesticide Programs will hold a public meeting to discuss the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) as it may relate to pesticide products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The goals of the workshop are to discuss and clarify the scope and potential application of GHS to pesticide products; to examine key issues raised in public comments on OPP's GHS White Paper; to gain a better understanding of stakeholder concerns and explore ways to address them; and to assess potential paths forward to maximize benefits and minimize the costs.

The meeting will take place on Wednesday, October 18, from 9:00 a.m. - 5:00 p.m. and on Thursday, October 19, from 8:30 a.m. - 12:30 p.m. It will be in 4th-floor conference room #4830 of Two Potomac Yard (north building), 2733 S. Crystal Drive, Arlington, VA. To facilitate entry into the secure EPA building, please pre-register for the meeting by Tuesday, October 10, by contacting Janelle Christian, Field and External Affairs Division, Office of Pesticide Programs, by telephone at 703-308-3003, or by e-mail at christian.janelle@epa.gov.

Agenda topics for the meeting include:

- Overview of GHS
- NAFTA and stakeholder perspectives on GHS
- Building blocks and sample label presentation
- Key issues and concerns raised in comments on the OPP White Paper
- Options for implementation mechanisms and a possible pilot
- Key state issues
- Education, training, and outreach

For more information on the GHS, including a link to OPP's White Paper, please visit our Web site at http://www.epa.gov/oppfead1/international/globalharmon.htm .

(Reprinted from: The Penn State Vegetable & Small Fruit Gazette, Volume 10, No. 8, August 2006)

2007 NYS FARMERS DIRECT MARKETING CONFERENCE

The Food Less Traveled: How Good Local Food Contributes to Healthy People and Healthy Communities

January 18-20, 2007 - Owego, NY

The Food Less Traveled: How Good Local Food Contributes to Healthy People and Healthy Communities is the theme for the 2007 NYS Farmers Direct Marketing Conference to be held January 18-20 at the Owego Treadway Inn in New York's southern tier region. This year's conference planning committee is working on workshops and sessions that will provide knowledge, resources and tools to help farmers to increase their farms ability to impact their farms health, their consumers' health and their community's health.
Tracks include:

- Personal health;
- Economic health for farmers and communities;
- Environmental health;
- Healthy farm families;
- Healthy neighbor relations;
- Health and hospitality on the farm;
- Healthy farm collaboratives;
- Healthy children/Healthy communities.

The conference will feature **pre-conference workshops**, as well. These workshops will spend the day covering a topic of importance to farm direct marketers. These workshops include:

- Employee training;
- Food service for farm markets;
- Start-up bakery;
- CSAs
- Livestock Marketing.

In addition to the full three days of workshops and sessions, the Farmers Market Federation of NY will be holding **a special market manager training program** sponsored by USDA's SARE program. This program is the first year of a three year program dedicated to develop professional standards for managing farmers markets. Market managers and Cornell Cooperative Extension Educators are encouraged to participate to learn how to work together to increase the capacity of markets to manage themselves more effectively to benefit farmers, consumers and the communities in which they reside.

The **NY Small Scale Food Processors** will be hosting their annual meeting at the 2007 Conference. The workshops for the NYSSFPA will include:

- Healthy practices for healthy foods;
- All you need to know to become a 20C licensed kitchen;
- Nutrient analysis and why it's important.

New to the conference in 2007 will be the **NYSFDMA Display Contest**. During the evening meals, teams of marketers will be given identical display materials and product and will race against the clock and each other to create the most attractive, most marketable display possible. The audience will then participate in a group discussion on the merits and failures of each display and judging will be done by applause. The teams that make it through the preliminary round on the first night of conference will move on to compete in the finals on Friday nights annual meeting night. Prizes will be awarded to contestants based on their level of advancement.

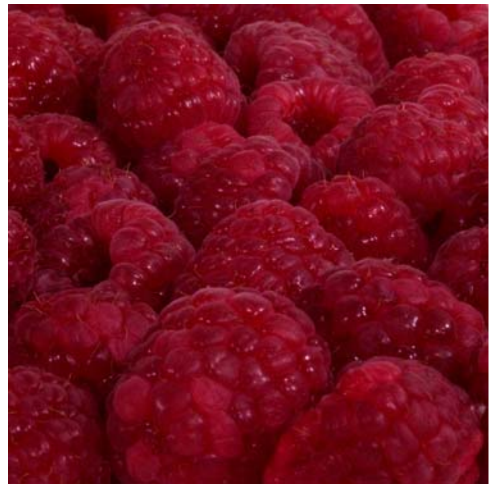
The **trade show** will run January 18 and 19 (Friday and Saturday) and will offer a wide variety of products for the farm direct marketing industry. You're sure to find the packaging you need, the seeds you've been searching for, the perfect gift items for your stand or the special gourmet food item that will make your cashier register ring!

Non-profits and other organizations whose mission and or current work are in alignment with this year's theme (Healthy Food, Healthy People and Healthy Communities) are encouraged to participate in the **New York Showcase**, an exhibition of the sponsors and leaders in this holistic strategic approach to good health.

The 2007 NYS Farmers Direct Marketing Conference, The Food Less Traveled: How Local Good Contributes to Healthy People and Healthy Communities, is co-hosted by the NYS Farmers Direct Marketing Association, the Farmers Market Federation of NY, Cornell's Community, Food and Agriculture Program, NY Farms!, NY Small Scale Food Processors Association, Cornell Cooperative Extension, CADE, and USDA's CNY RC&D.

For more information, call the NYSFDMA office at 315-475-1101 or email diane99@dreamscape.com OR call the NY Farms! office at 607-659-3710 or email nyfarms@clarityconnect.com .

CORNELL RASPBERRY HIGH TUNNEL OPEN HOUSE



Cornell University invites you to attend the second annual Raspberry High Tunnel Open House to observe raspberries growing and fruiting in late October – well past the time when they are normally in season. Come by Cornell's East Ithaca farm on Friday October 20 between 1:00 and 4:00 to meet with researchers, taste fruit, study this new technology and market opportunity, and hear results from year 1 of this research and demonstration trial.

The East Ithaca Farm is located on Maple Ave., adjacent to the Cornell Campus. Coming from Rt. 79 east, turn right onto Pine Tree Rd., go through the stop light by East Hill Plaza, and take the next left on to Maple Ave. The research farm is on the right, past the cemetery.

Coming from Rt. 13 north, take Rt. 366 towards Ithaca. Turn left onto Pine Tree Road at the flashing red light, just past Cornell Orchards. Take the next right onto Maple Ave. The farm is on the right, past the cemetery.
Coming west on 79, or south on 96 or 89, take Rt. 79 east through Ithaca and up the hill. Midway up the hill, bear left onto Rt. 366. At the first stoplight, take a soft right onto Maple Ave. (not a hard right). The farm is at the top of the hill on the left.

For more information contact Molly Shaw, meh39@cornell.edu, 607-687-4020, or Cathy Heidenreich, mcm4@cornell.edu, 315-787-2367.

FALL CLEANSWEEP PROGRAM REMINDER

The New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Agriculture and Markets (Ag. & Mkts.), Soil and Water Conservation District (SWCD), and Cornell Cooperative Extension are pleased to announce the CleanSweep NY Program for Fall of 2006.

Chautauqua, Cattaraugus, Allegany, Steuben, Chemung, and Schuyler Counties

Deadline for Filing Registration Forms for Unknown or Unlabeled Products *Greater Than* 50 lbs/ 5 gallons

The New York State Department of Environmental Conservation will provide, at absolutely no cost, free onsite sampling and analysis provided that registration of these unknown/unlabeled products, at the quantities indicated, are properly received by October 3rd. After this date, any unknown/unlabeled materials that exceed the stated threshold will require laboratory analysis at *your* expense. Additionally, anyone bringing unknown or unlabeled materials to the collection site that *exceeds* the quantity limitations may be required to pay the contractor for analysis at the going contractor's analytical rate.

Holders of unknown/unlabeled products, weighing 50 lbs *or less* or have a volume of 5 gallons *or less*, are only required to properly register with CleanSweep NY, no later than the date below. No analysis will be required for these smaller quantities.

Final Deadline for Filing Registration Forms
In order to properly plan and carry out this program, it is important that you first request and then fill out a proper CleanSweep NY Registration Form and mail via US Postal Service. Your registration must be *received* no later than:

Thursday, October 26, 2006.

October 26, 2006	The CleanSweep NY program anticipates mailing scheduled appointment times for drop-off at identified collection sites by this date. Additionally, exact site addresses and directions to each location will be posted at this web address.
November 7-9, 2006	**The Collections!** We are scheduling 3 collection days at 3 different sites in the target area.

Interested in Receiving a Registration Form? Contact CleanSweep NY:
info@cleansweepny.org or call 1-877-SWEEPNY (1-877-793-3769) or call NYS DEC Region 8 Bath Office: 607-776-2165 Ext. 21 or call NYS DEC Region 9 Buffalo Office: 716-851-7220

PLAN TO ATTEND NABGA'S 2007 CONFERENCE

North American Bramble Growers Association

Our conference this year, the **National Bramble Conference,** will be held on January 15-17, 2007 in Columbus, Ohio, in association with the Ohio Fruit and Vegetable Congress. The Congress also includes sessions on tree fruit, other small fruit, vegetables, direct marketing, and a large trade show, all of which are also open to bramble growers who register for the conference.

Registration is being handled by the Ohio organization, and complete information will be sent to you later this fall. Here's the bramble schedule as it stands; it's still somewhat subject to change as all the different tracks come together in the next few weeks for the final program.

Monday, January 15

1:30-4:30 Bramble ABCs Workshop. Led by Dick Funt, retired OSU Extension specialist–and an experienced commercial bramble grower himself– with Ohio grower Tom Althauser and NABGA Vice President Tom Walters, NW Washington Research & Education Center

Evening: NABGA Executive Council meeting

Tuesday, January 16

9:00 **Raspberry Varieties -** Courtney Weber, Cornell University
Primocane Black Raspberry Breeding - Peter Tallman, independent breeder, Longmont, CO
10:00 **Bramble Diseases -** Mike Ellis, Ohio State University
11:00 **GAPS for Bramble Growers -** Betsy Bihn, National GAPS Coordinator, Cornell University
1:30 **Roundtable Discussion: Organic Bramble Possibilities**
3:00 **Grower Spotlight:** Dean Henry, The Berry Patch Farm, Nevada, IA, and a second grower (still being confirmed)
Evening: **NABGA Dinner** – an informal opportunity to talk and socialize with others in the bramble community

Wednesday, January 17

8:30 **NABGA Annual Meeting**
Reports on Research- Gina Fernandez, NC State University, Annemiek Schilder, Michigan State University, and Fumiomi Takeda, USDA-ARS

10:00 **Building Demand: Bramble Industry Promotion-** Henry Bierlink, Washington Red Raspberry Commission
11:00 **Health Benefits of Brambles-** Gary Stoner, OSU Medical Center
12:00 **Post-Harvest Handling for Quality Berries-** presenters TBA

We are also planning a bramble research poster session. Contact Kim Lewers at lewersk@ba.ars.usda.gov if you'd like to submit a poster.

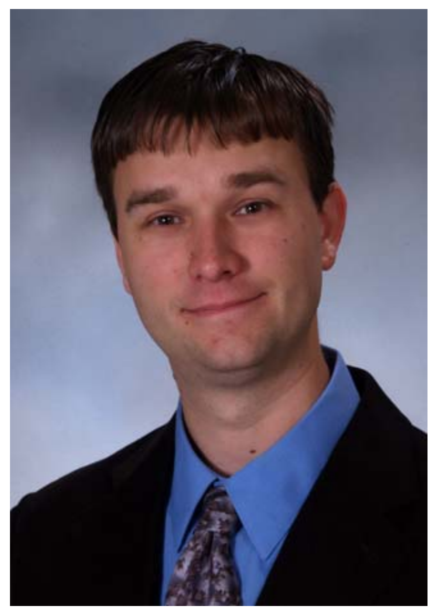
The conference will be at the Greater Columbus Convention Center in downtown Columbus. The Hampton Inn and Suites, the headquarters hotel for the 2007 Growers Congress, is located directly across the street from the conference. A block of rooms has been reserved for participants at a special room rate of $99/night + tax (standard king or double bed for one person). Call 614-559-2000 or visit their website at www.hamptoninn.com. The Drury Inn and Suites (614-221-7008) and Crowne Plaza (614-461-4100) will also be offering special conference rates.

Information is at www.ohiofruit.org, with more to come – we will also be posting information on our own website.

To find out about the Columbus area, visit www.columbusconventions.com. Mark your calendar and plan to register soon!

NEW TREE FRUIT AND SMALL FRUIT PATHOLOGIST HIRED AT GENEVA

Joe Ogrodnick, Communications Services, Cornell University's New York State Agricultural Experiment Station, Geneva, NY 14456



Kerik D. Cox has accepted an appointment as assistant professor of tree fruit and berry crop pathology in the plant pathology department at the Geneva Experiment Station. The position addresses two functional areas, extension (50%) research (50%), and includes responsibility for leading the statewide Extension Program on tree fruit and berry crop pathology in cooperation with other Cornell extension faculty and personnel. The extension component will involve an education program using traditional and innovative communication technologies, and will address the cause and control of diseases of those crops in New York State, and be directed toward extension educators, growers, private consultants, and agribusiness personnel.

"We are pleased that Kerik has joined our faculty, and look forward to working with him as he develops a research and extension program that will be important to the stakeholders of New York," said Harvey Hoch, plant pathology department chair. Hoch pointed out that Cox brings to Cornell solid experiences with peach and blueberry disease problems—a background that will help him to easily transition into solving problems on these and other fruit diseases of the region. "With 50% extension responsibilities, we anticipate Kerik's role as the 'point person' for tree fruit and berry diseases to continue the longstanding recognition the Experiment Station and the department have historically held in this area."

"This position was an excellent match for my scientific background and interests," Cox said when asked why he applied for the position. "I've worked primarily with tree and small fruit pathosystems and with fruit extension pathologists throughout my scientific career, and I feel most familiar and comfortable with issues related to fruit disease and fruit production systems." Cox added that another important factor in his decision was that Cornell has one of the foremost plant pathology programs, and is one of the best places to do fruit research in the country. "My colleagues are regarded as leading experts in their areas of expertise and the research facilities are cutting-edge."

Cox's research interests in the past have involved the use of more basic research approaches to answer applied questions about fruit disease problems. In his research on peach and blueberry he used techniques ranging from epidemiological modeling and biochemistry to georadar and transgenes to answer questions about the development and management of disease. Currently, he is in the process of shifting his focus from peaches and blueberries towards apples, cherries, strawberries, and the other small fruit planted in the Northeastern United States. "I still plan to focus my research on questions related to disease development and disease management." he said "I'm interested in investigating biological, safe chemical, and cultural control practices as well as pathogen survival and inoculum dynamics of fruit diseases of critical importance to the region." He added that he plans to find himself a research niche in apples and start work on one or two small fruit critical needs diseases. "At the moment, I'm leaning toward apple powdery mildew. A lot of research focuses on mapping quantitative trait loci for disease resistance, which leaves a lot of other aspects of this disease open for investigation," he said. "My other short-term goals are to identify some critical research needs for key fruit commodities so that I can put together a few research proposals in the fall, and begin looking into the possibilities of a longer term molecular or genomic project. One long-term goal for my program would be the development of a fruit pathology genomics initiative that would be of benefit to the New York fruit industry."

Cox received a B.S. (Biology) in 1998 from Furman University, an M.S. (Plant Pathology) in 2000 from the University of Georgia, Athens, and his Ph.D. (Plant Pathology) in 2004 also from the University of Georgia, Athens. His most recent position was that of a postdoctoral associate in the department of entomology, soils and plant science at Clemson University.

Cox is a recipient of numerous awards and honors. Among them is the Roger C. Pearson Award from he American Phytopathological Society (Roger Pearson was a plant pathologist in the department); The Kenneth E. Papa Outstanding Graduate Student Award, Georgia Association of Plant Pathologists; Outstanding Teaching Assistant Award, April, 2002; the E. Broadus Brown Award for the best M.S. Student in the College of Agricultural and Environmental Sciences, University of Georgia and First Place in the Georgia Association of Plant Pathologists Student Paper Competition, March 2000. He is a member of the American Phytopathological Society (APS) and the Georgia Association of Plant Pathologists (GAPP).

Cox's wife, Rosemary, is broadly trained in analytical chemistry, plant pathology, and molecular microbiology. "We're hoping that she'll be able to eventually find a job in the area," he said. "We have no children yet, but we'd like to start a family in Geneva in the future."

As far as interests outside of work and career go, Cox says he's a runner who runs mainly for health reasons not for competition. "I'm also heavily interested in computer hardware, computer networking, and audio/video technology," he said. "I think I'll be able to integrate aspects of this hobby into my extension and research programs. My other out-of-work interests include painting and movies, particularly the foreign and horror genres."

Kerik Cox can be reached at kdc33@cornell.edu. His office is in room 221 Barton lab.

STRAWBERRY DORMANCY ONSET: REVIEWING SOME KEY POINTS

Kevin Iungerman, Extension Associate, Cornell Cooperative Extension Northeastern New York Commercial Fruit Program, Balston Spa, NY

I had a call yesterday concerning the advisability of using 2,4-D in strawberries at this time. My response was "don't do it now - it is too soon, and injury is likely as your plants are still actively growing." Back in 2001 I the whole issue of dormancy onset in strawberries, and revisiting it, I decided the information was still on-the-money; and so I have updated the article for this newsletter as it provides, I think, a useful review of the dormancy process, and for the grower in question, and you, it explains why you should hold off on the 2,4-D for just about another month.

Much of the autumn weed control options are often premised upon ensuring that strawberries are fully dormant prior to the use of a given herbicide. For instance, terbacil (Sinbar), norflurazon (Solicam), and 2,4-D are to be used following dormancy, and dichlobenil (Casoron) requires daily high temperatures below 45° F and Pronamide (Kerb) is to be used prior to the ground freezing. So "dormancy" as a common timing prescription is out there, and is widely understood right? Wrong. Growers with many years of experience ask how *I* know when strawberry plants are dormant. I had been at a loss to give them a concise answer. So, let's review.

We know dormancy means a cessation of growth. But what about floral initiation which is going on right now, and which we can't see, and how might 2,4-D use impact this process? How do you know when things cease? More importantly, does it matter in getting it precisely right? The simple answer is to be found in the last paragraph if you wish to cut to the chase. If you like enhanced detail, read on for the fuller picture.

I imagine that you have all heard or seen various advice about gauging when strawberries are dormant. There are various references to the occurrence of so many hard freezes (several), degree day accumulation, seasonal day length parameters, and calendar dates. Little information exists as regards examining the plant itself for indications of dormancy. I myself previously generalized from other plant experience. Keeping in mind all of the other assorted factors mentioned, I looked to see if there was any tender new leaf growth unfolding at the crown. I also looked at the plant's overall leaf coloration cast (a darkened to more faded grayish-green) and perhaps some early frost injury (loss of leaf turgor, some shriveling). Did I know if differentiation was still going on? No, but it likely does for a time.

Differentiation refers to the first discernible change from the vegetative to a floral primordium, which in turn is itself, only the first recognizable and as yet undifferentiated phenotypical stage of the plant's developing floral organs. "Discernible" though refers to microscopic lab viewing and not field examination. So we rely upon proxy references.

We know that it is fall atmospheric conditions that induce the differentiation process. Daylengths shorter than 14 hours in conjunction with temperatures falling below 59°F are considered the induction factors for floral initiation, with days of 8 to 11 hours of daylight being optimal. By the time temperatures of 20°F are reached plants are considered to be hardened and floral development ceases. What is happening? As the days become shorter, there is a shift in balance of two phytochrome pigment forms in plant tissue. During the day, the red light range in the visible portion of the electromagnetic spectrum (650-660 nanometer (nm)) induces the formation of phytochrome P_{fr} but at night P_{fr} shifts to the P_r form. P_r is normally converted back to P_{fr} by far red light (725 - 730 nm) that comprises a smaller portion of sunlight's energy spectrum. With longer nights there is more P_r accumulation. Aside from the daily cycling of these forms for use in biological reactions, the ratio at given points, and the rate at which that ratio shifts, triggers responses that essentially measure where the plant is at in its annual cycle. It tells time.

I have read that growers progressively to the south enjoy greater differentiation potential due to milder autumns. It is this enhanced potential which translates into generally greater per plant yield. This probably has similar yield implications for strawberry plants grown within raised hoop houses and or where row covers are retained longer. As differentiation can continue for considerable time in the fall (until such time as temperature shuts the process down and plants harden-off), and our autumn periods have lately seemed more prolonged (compressing or even absenting hard frosts till quite late), and differentiation is realized non-uniformly by cultivars, can my field method, or any of the methods advanced to determine dormancy, really serve as a functioning indicator proxy?

Researchers and nurseries have wrestled with this problem of dormancy for other reasons. Researchers from the University of Helsinki wrote of their work with the strawberry cultivar 'Korona' in which they were applying different short day treatments (SD - being a photoperiod of 12 hr. and a temperature of 15°C [59°F]), ranging from 2 to 10 weeks in order to induce flowering. They were concerned with determining when dormancy was achieved because following the SD treatments, the plants were to be cold stored for 1 or 2 months at -1°C [30.2°F], and then forced in a greenhouse. As dormancy affects plant storability, they were attempting to determine the optimum time to dig "dormant" plants. Could anyone tell them how to ensure plants were dormant prior to digging and storage? (So growers, we are not alone in our perplexity regarding dormancy.)

Peter Hicklenton, a plant researcher with Agriculture and Agri-Food Canada, at the Atlantic Food and Horticulture Research Center in Kentville, Nova Scotia replied to their question. First off, Peter acknowledged that "dormancy is indeed a complicated process in strawberry" and "you really do need to know the characteristics of the cultivar" in order to derive "specific" dormancy requirements. Working with Kent, Veestar and Bounty, it was found that,

> *(the) degree of chilling necessary to assure high post-storage quality is satisfied quite early. Full survival for these cultivars occurs when plants are lifted from the field in early November. Over several years of study we have established that this date varies very little even though chilling hours until early November (below 8°C)* [46.4 °F] *have varied between about 450 and 700 from one season to another.*
>
> *It appears that dormancy may occur in several stages: Early stage dormancy (sufficient to ensure high quality in plants stored at -1°C or -2°C* [30.2 or 28.4°F] *for several months) is induced by declining photoperiods and relatively little chilling; deep dormancy sufficient to ensure the plants survive more severe winter temperatures may require exposure to extended periods of chilling, at lower temperatures.*

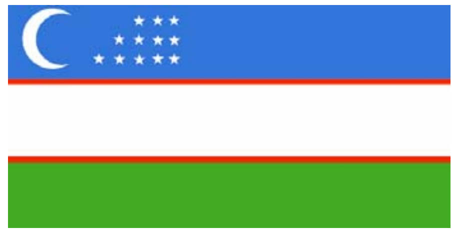
Peter suggested that they change their fixed photoperiod to one programmed to progressively decline in daylength and that this be akin to the natural conditions at their latitude from early September to late October, and that they ensure that the plants receive at least 450 hours of chilling temperatures (below 8°C [46.4 °F]). He closed by saying that "there is some good evidence that cold hardiness in plants ... respond(s) to the rate of change of daylength rather than a particular number of 'short days'". So for our purposes, by late October, the floral initiation process has progressed sufficiently that next year's crop is primed.

The North American Strawberry Growers Association (NASGA) funded research in the late 1990's looking at these same questions. Calendar date was a better indicator of dormancy status than any plant morphological or physiological character that might be seen in late autumn. As with Nova Scotia and Helsinki, the criteria is good growth and production performance when warmth returns (or is supplied).

Now, back to the applied world of 2,4-D application timing. Dr. Marvin Pritts of Cornell reports that they've tried, but failed, to create injury symptoms by spraying 2,4-D in late October. So, while theory suggests a negative effect, in practice it really doesn't look like 2,4-D has an impact if sprayed in late fall. A look at the calendar should indicate when it is safe to apply fall herbicides rather than determining "dormancy". The bottom line is, regardless of how the plants "look", just apply the herbicide at about this same time each year and there should be few problems. Here that would be late October to early November (as weather and conditions allow).

(Note: Reprinted with permission from northeast Fruitlet, Vol. 10, No. 8, September 2006. Originally "Simplifying Strawberry Dormancy Issues For Fall Weed Control", Kevin Iungerman, Northeast Fruitlet, Oct 15, 2001, and partly developed upon exchanges concerning dormancy on the Small Fruit Discussion Site out of Oregon State University.)

UZBEKISTAN, ANOTHER SOURCE OF TEMPORARY LABOR?



Steven A. McKay, Extension Educator, Hudson Valley Commercial Fruit Program, Columbia County CCE, Hudson, NY

Uzbekistan is a country that's located in what used to be the south-central part of the Soviet Union. Previously a part of Persia, this is the area where many cultivated fruits and vegetables had their origin. It is currently known as the fruit and vegetable basket for Russia and other surrounding countries. A majority of Uzbekis is involved in the production of grapes, apples, and many vegetables. In spite of the outside markets for their produce, there are still quite a number of people who are unemployed. Considering their skills, these people could be a source of labor for local agricultural producers under the H visa program.

The tightening of the border with Mexico, and the stronger enforcement of immigration bans has led to a tighter market for labor in all Hudson Valley industries, including fruit and vegetable production. Our NY State Department of Labor has been taxed to find local persons available to work on farms. Workers may last a short while, but the relatively low pay and temporary nature of the work are not very attractive.

Many of our farmers are turning to the H2 visa program as a more secure method of obtaining workers. These workers are brought from other countries where jobs are scarce. They complete a work contract for specific dates, and then return to their country of origin. Transportation and housing are provided along with a wage of more than nine dollars per hour. If a good relationship is worked out between workers and farmers, the worker may be invited back year after year.

In September, I had the opportunity to visit Uzbekistan and get to know agricultural workers there. In reviewing the situation, I was able to identify some advantages and disadvantages to considering Uzbekis as a source of labor.

Advantages include:

1. the people are experienced and sometimes educated in trade school about fruits and vegetables similar to those we grow in the Hudson Valley,
2. the people are friendly and cooperative with a reputation of following instructions,
3. the consulate is willing to issue H2A visas on a trial basis,
4. round trip air fares are similar for Latin America and Uzbekistan.

Disadvantages include:

1. the long distance the country is located from the US,
2. lack of English skills,
3. no actual experience using Uzbekis at the local level.

(For further information or comment, Steven may be reached at 518-828-3346 or sam44@cornell.edu).

THAT'S A BERRY GOOD QUESTION!!!

Kathy Demchak, Department of Horticulture, Penn State University

Q. Last winter at Mid-Atlantic Fruit and Vegetable Convention in Hershey, I heard a grower mention that he was thinking of using slug bait in the fall to decrease the slug population in strawberries the following spring. Does this work? If I apply slug bait this fall, what timing is best? (Ernie Mast, Mast Farms, Morgantown, PA)

A. Yes, this was something Ed Weaver mentioned on the grower panel on strawberry plasticulture. Most slug species over-winter as eggs which hatch in the spring. A few adults may also survive the winter. So, it makes sense that if you treat the field for slugs in early fall, thereby decreasing the number of adults before they lay eggs, you should have fewer slugs in the spring. A second benefit is that you may be able to avoid the need for slug bait use in the spring when the fruit and harvesters are in the vicinity. So, take a look, especially after dark, and see if you can find slugs now (they don't necessarily have to be full size to lay eggs). If you find slugs, you may want to consider treating. Early fall (mid-October or earlier) is best. Once the eggs are laid, it's too late. As always, follow label directions and restrictions. If you also want to check for eggs at some point, they are clear and small - about 1/8 inch in diameter - and are laid in clusters of about 20-30, though the number can vary widely. The eggs may be on the soil, just under the straw mulch, or the slugs may cover them with soil to protect them.

P.S. If you want to figure out which slug(s) you have, the Carnegie Museum of Natural History has an excellent slug key at http://www.carnegiemnh.org/mollusks/palandsnails/key.htm and the Pacific Northwest Nursery IPM site has a gallery of slug photos at http://oregonstate.edu/Dept/nurspest/slug_taxonomy.htm.

(Reprinted with permission from the Pennsylvania Vegetable and Small Fruit Gazette, Vol. 10, No. 9, September 2006, pictures from the Berry Diagnostic Key, by Marvin Pritts, Cornell University)

WEATHER NOTES

NEW YORK CROP WEATHER SERVICE NOTES

Week of August 27th- Temperatures averaged in the mid-sixties. The high was 91 degrees in New York City and the low was 42 degrees in Canton. Rainfall varied from only 0.04 inches at Glen Falls to 1.66 inches in Dansville. Totals since April 1st ranged as high as over 14 inches above normal in Morrisville. Growing Degree Days since April 1st were also above normal in all locations by as much as plus 598 at Oneonta.

Week of September 3rd – It was a mainly gray, cool and damp week across New York State with rainfall well above normal. A fast moving low pressure system brought over running rainfall to the region Sunday with the cold front becoming stationary over the Midwest and upper Mid-Atlantic States on Monday as a weak area of surface high pressure built in. The stationary front lifted north with another area of low pressure over portions of central New York, the lower Catskills, and the mid Hudson Valley where one to three inches fell. Cool Canadian high pressure settled in over the northeast with dry weather until Friday. The remnants of Ernesto brought another batch of rain to the region Friday night through Saturday. The heaviest rainfall occurred over the Niagara Frontier, Central New York, and the upslope regions of the Catskills where another one to three inches fell. Two and a half to five inches of rain was common across much of western and central New York, as well as the eastern Catskills and mid Hudson Valley. The North Country only received about a half inch of rainfall or less for the week. Temperatures were slightly below normal for the week. They were generally two to four degrees below normal. Some isolated frost occurred over the northern Adirondacks and the North Country in the middle of the week.

Week of September 10th - The week started out cool and damp as the remnants of Tropical Storm Ernesto lifted northeast through upstate New York on Sunday with lingering light rain and drizzle. Monday and Tuesday were mainly dry as high pressure built in from the Midwest behind Ernesto. With a northwest flow, daytime temperatures remained below average with seasonable overnight lows due to cloud cover. A weak cold front moved through the region on Wednesday bringing only a few showers to some spots. Thursday and Friday featured mainly clear and dry conditions as high pressure drifted across the area. Daytime high temperatures warmed to above average both days as a south to southwest flow developed across the state with high pressure sliding to the Mid Atlantic Coast. On Saturday a cold front moved through the region and brought scattered showers and thunderstorms. Some of the storms were severe and produced hail mainly across eastern portions of the state.

Week of September 17th – High pressure dominated the region the first half of the week bringing us the first frost of the season across portions of the North Country. A slow moving surface and upper level system plagued the region for the latter half of the week bringing rain Thursday and Friday. Some areas received heavy rainfall especially across portions of eastern Long Island.

Week of September 24th – The region was under the influence of a subtropical high the first two days of the week with average temperatures nearly 10 degrees above seasonal normal and highs of 75 to 85 degrees. A cold front passed through the region on Tuesday bringing rain to the region with nearly an inch of rain along the Niagara Frontier. A Canadian air mass moved in to dominate the weather for the remainder of the week with temperatures dipping to the freezing point in a few areas in the Adirondacks and Catskills the early morning hours of Friday the 22nd. The high moved off the coast making way for warm and moist air to return to the region Saturday bringing another period of rain associated with the approach and passage of a warm front.

Check out the NYSAES Tree Fruit and Berry Pathology web site at:
www.nysaes.cornell.edu/pp/extension/tfabp

Questions or Comments about the New York Berry News?

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 27th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	84	52	67	-2	125	2310	306	0.22	-0.55	24.54	8.31
Glens Falls	83	47	65	-2	105	1934	178	0.04	-0.80	24.72	8.83
Poughkeepsie	88	56	70	0	139	2411	315	1.07	0.30	24.62	5.93
Mohawk Valley											
Utica	80	52	66	-2	115	2008	186	0.09	-0.81	24.29	5.90
Champlain Valley											
Plattsburgh	80	46	64	-3	98	2031	249	0.28	-0.67	19.05	3.65
St. Lawrence Valley											
Canton	78	42	63	-2	91	1894	296	0.47	-0.51	13.91	-2.19
Massena	77	46	63	-3	90	1938	254	0.21	-0.66	17.97	3.26
Great Lakes											
Buffalo	80	57	68	2	130	2312	398	1.19	0.21	14.39	-1.87
Colden	76	52	64	-1	102	1749	189	0.72	-0.28	18.94	0.33
Niagara Falls	81	54	68	0	126	2205	282	0.62	-0.30	14.29	-1.40
Rochester	83	56	69	3	136	2345	494	0.45	-0.36	17.94	3.94
Watertown	78	50	65	0	107	1965	346	0.59	-0.23	12.34	-0.29
Central Lakes											
Dansville	82	53	67	-1	122	2019	155	1.66	0.89	19.15	3.81
Geneva	80	53	66	-2	116	2011	163	0.20	-0.55	16.83	1.60
Honeoye	80	51	66	-3	117	2001	75	0.71	-0.06	14.68	-0.41
Ithaca	80	50	66	0	112	1861	185	0.48	-0.29	20.86	4.45
Penn Yan	82	57	68	1	125	2152	304	0.60	-0.15	12.26	-2.97
Syracuse	82	54	68	2	128	2241	363	0.44	-0.38	23.88	6.64
Warsaw	80	52	65	2	108	1681	232	0.83	-0.08	21.37	3.48
Western Plateau											
Alfred	78	48	64	0	98	1549	120	0.76	-0.08	17.98	0.84
Elmira	81	53	68	2	124	1902	129	0.97	0.27	20.16	4.49
Franklinville	78	49	65	3	103	1596	287	0.43	-0.48	17.07	-1.03
Sinclairville	82	52	66	3	115	1794	325	0.92	-0.13	16.03	-4.03
Eastern Plateau											
Binghamton	79	56	66	0	113	1914	192	0.93	0.16	26.12	9.61
Cobleskill	80	51	64	-2	101	1827	225	0.51	-0.31	24.31	6.65
Morrisville	79	52	64	0	98	1696	169	0.80	-0.04	31.71	14.21
Norwich	82	51	66	2	117	1821	217	0.44	-0.35	26.09	8.59
Oneonta	84	50	66	4	115	2079	598	0.84	0.00	26.88	7.74
Coastal											
Bridgehampton	85	60	71	2	146	2280	346	0.54	-0.29	25.54	8.19
New York	91	66	77	3	187	3158	562	1.42	0.58	27.36	8.84

1. *D*eparture *from N*ormal
2. *Y*ear *to D*ate: Season accumulations are for April 1st to date

The information contained in these weekly releases are obtained from the New York Agricultural Statistics Service (http://www.nass.usda.gov/ny/), who in turn obtains information from reports from Cornell Cooperative Extension agents, USDA Farm Service Agency, Agricultural Weather Information Service Inc., the National Weather Service and other knowledgeable persons associated with New York agriculture.

WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 3rd, 2006

	Temperature				Growing Degree Days (Base 50)			Precipitation (inches)			
	High	Low	Avg	DFN[1]	Week	YTD[2]	DFN	Week	DFN	YTD	DFN
Hudson Valley											
Albany	79	50	64	-3	102	2412	296	1.46	0.69	26.00	9.00
Glens Falls	76	41	61	-4	81	2015	163	1.11	0.30	25.83	9.13
Poughkeepsie	80	54	64	-4	102	2513	296	2.89	2.05	27.51	7.98
Mohawk Valley											
Utica	75	46	62	-4	82	2090	165	1.88	0.91	26.17	6.81
Champlain Valley											
Plattsburgh	77	45	62	-2	86	2117	239	0.29	-0.59	19.34	3.06
St. Lawrence Valley											
Canton	78	37	61	-3	79	1973	286	0.52	-0.46	14.43	-2.65
Massena	76	40	62	-1	89	2027	254	0.44	-0.47	18.41	2.79
Great Lakes											
Buffalo	79	51	64	-3	99	2411	384	2.55	1.61	16.94	-0.26
Colden	76	49	61	-4	78	1827	175	2.85	1.78	21.79	2.11
Niagara Falls	79	50	64	-3	98	2303	269	2.36	1.43	16.65	0.03
Rochester	79	50	65	-1	105	2450	491	2.08	1.31	20.02	5.25
Watertown	78	39	64	0	96	2061	347	1.36	0.52	13.70	0.23
Central Lakes											
Dansville	77	44	61	-5	80	2099	126	3.09	2.32	22.24	6.13
Geneva	76	46	61	-5	81	2092	135	3.20	2.43	20.03	4.03
Honeoye	77	39	61	-7	76	2077	35	2.76	1.99	17.44	1.58
Ithaca	78	45	62	-4	83	1944	170	3.30	2.47	24.16	6.92
Penn Yan	74	43	62	-5	83	2235	278	3.17	2.40	15.43	-0.57
Syracuse	75	47	63	-4	93	2334	347	1.71	0.86	25.59	7.50
Warsaw	75	47	62	-1	84	1765	235	3.99	3.03	25.36	6.51
Western Plateau											
Alfred	75	43	60	-3	71	1620	110	4.25	3.41	22.23	4.25
Elmira	79	47	63	-2	95	1997	122	4.64	3.94	24.80	8.43
Franklinville	77	42	59	-3	68	1664	280	4.93	3.97	22.00	2.94
Sinclairville	76	47	62	-1	89	1883	327	3.60	2.49	19.63	-1.54
Eastern Plateau											
Binghamton	77	49	61	-3	82	1996	176	2.90	2.13	29.02	11.74
Cobleskill	77	44	61	-3	80	1907	213	2.29	1.45	26.60	8.10
Morrisville	74	46	60	-3	73	1769	155	2.38	1.48	34.09	15.69
Norwich	81	48	62	-2	87	1908	212	4.07	3.23	30.16	11.82
Oneonta	82	50	64	3	100	2179	615	2.78	1.94	29.66	9.68
Coastal											
Bridgehampton	77	55	66	-3	111	2391	328	4.94	4.10	30.48	12.29
New York	79	62	69	-4	136	3294	540	1.98	1.14	29.34	9.98

1. *D*eparture *from N*ormal
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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 10th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	80	52	65	2	106	2518	304	0.18	-0.54	26.18	8.46
Glens Falls	79	41	61	-1	81	2096	162	0.07	-0.70	25.90	8.43
Poughkeepsie	82	56	67	2	119	2632	308	0.15	-0.69	27.66	7.29
Mohawk Valley											
Utica	79	46	63	-1	90	2180	166	0.17	-0.88	26.34	5.93
Champlain Valley											
Plattsburgh	82	43	64	3	98	2215	255	0.20	-0.60	19.54	2.46
St. Lawrence Valley											
Canton	79	40	62	1	84	2057	296	0.24	-0.71	14.67	-3.36
Massena	79	42	62	1	83	2110	262	0.43	-0.41	18.84	2.38
Great Lakes											
Buffalo	77	54	64	-1	99	2510	383	0.07	-0.81	17.01	-1.07
Colden	75	51	61	-1	79	1906	175	0.16	-0.96	21.95	1.15
Niagara Falls	79	52	64	0	101	2404	271	0.11	-0.80	16.76	-0.77
Rochester	81	58	66	2	112	2562	506	0.19	-0.56	20.21	4.69
Watertown	78	37	61	-2	77	2138	343	0.18	-0.63	13.88	-0.40
Central Lakes											
Dansville	80	53	64	1	101	2200	130	0.35	-0.49	22.59	5.64
Geneva	80	52	63	-2	94	2186	133	0.79	0.02	20.82	4.05
Honeoye	80	51	63	-3	94	2171	25	0.09	-0.68	17.53	0.90
Ithaca	79	51	63	1	89	2033	174	0.09	-0.75	24.25	6.17
Penn Yan	81	53	65	1	104	2339	286	0.43	-0.34	15.86	-0.91
Syracuse	80	48	64	-1	99	2433	349	0.05	-0.86	25.64	6.64
Warsaw	74	49	61	2	80	1845	246	0.45	-0.53	25.81	5.98
Western Plateau											
Alfred	76	48	60	-1	70	1690	112	0.57	-0.27	22.80	3.98
Elmira	80	50	63	0	92	2089	125	0.19	-0.54	24.99	7.89
Franklinville	76	50	61	3	80	1744	296	0.17	-0.81	22.17	2.13
Sinclairville	79	49	62	2	86	1969	339	0.15	-0.97	19.78	-2.51
Eastern Plateau											
Binghamton	75	52	62	-1	82	2078	173	0.02	-0.79	29.04	10.95
Cobleskill	79	50	62	1	86	1993	220	0.36	-0.55	26.96	7.55
Morrisville	78	49	60	-2	70	1839	151	0.43	-0.49	34.52	15.20
Norwich	79	52	62	0	83	1991	216	0.43	-0.47	30.59	11.35
Oneonta	78	50	63	3	91	2270	637	0.33	-0.51	29.99	9.17
Coastal											
Bridgehampton	80	55	67	1	123	2514	335	0.56	-0.28	31.04	12.01
New York	85	63	73	2	159	3453	553	0.29	-0.55	29.63	9.43

1. *D*eparture *from N*ormal
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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 17th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	75	43	61	-1	81	2599	303	0.94	0.24	27.12	8.70
Glens Falls	73	33	58	-3	55	2151	150	0.72	0.01	26.62	8.44
Poughkeepsie	75	41	61	-3	79	2711	296	4.44	3.64	32.10	10.93
Mohawk Valley											
Utica	71	42	59	-2	68	2248	159	0.35	-0.70	26.69	5.23
Champlain Valley											
Plattsburgh	75	39	59	-2	62	2277	250	0.25	-0.48	19.79	1.98
St. Lawrence Valley											
Canton	72	32	57	-2	53	2110	288	1.09	0.18	15.76	-3.18
Massena	69	36	57	-3	50	2160	252	0.74	-0.10	19.58	2.28
Great Lakes											
Buffalo	71	46	62	-1	84	2594	380	2.40	1.57	19.41	0.50
Colden	70	41	59	-1	64	1970	173	0.79	-0.33	22.74	0.82
Niagara Falls	72	45	61	-2	80	2484	266	0.76	-0.13	17.52	-0.90
Rochester	72	45	63	1	93	2655	512	2.20	1.50	22.41	6.19
Watertown	72	35	59	-2	63	2201	339	1.73	0.96	15.61	0.56
Central Lakes											
Dansville	71	43	60	-2	74	2274	121	1.29	0.48	23.88	6.12
Geneva	72	41	59	-4	63	2249	114	1.96	1.19	22.78	5.24
Honeoye	72	37	59	-5	65	2236	-1	2.05	1.29	19.58	2.19
Ithaca	72	41	59	-2	65	2098	166	0.54	-0.30	24.79	5.87
Penn Yan	71	41	60	-2	75	2414	279	1.16	0.39	17.02	-0.52
Syracuse	74	43	61	-1	82	2515	348	1.08	0.17	26.72	6.81
Warsaw	66	39	56	-3	47	1892	235	1.02	0.05	26.83	6.03
Western Plateau											
Alfred	71	41	57	-2	50	1740	106	0.89	0.05	23.69	4.03
Elmira	72	41	60	-1	73	2162	122	0.60	-0.15	25.59	7.74
Franklinville	72	41	58	1	59	1803	303	1.12	0.17	23.29	2.30
Sinclairville	73	49	61	3	78	2047	355	0.65	-0.47	20.43	-2.98
Eastern Plateau											
Binghamton	72	44	58	-3	60	2138	162	0.99	0.21	30.03	11.16
Cobleskill	75	37	56	-4	46	2039	200	0.99	0.08	27.95	7.63
Morrisville	71	40	57	-3	52	1891	141	0.76	-0.22	35.28	14.98
Norwich	72	40	58	-2	56	2047	206	1.22	0.31	31.81	11.66
Oneonta	76	40	60	2	69	2339	649	1.47	0.63	31.46	9.80
Coastal											
Bridgehampton	72	45	61	-4	80	2594	313	6.31	5.48	37.35	17.49
New York	79	56	67	-2	123	3576	544	1.23	0.43	30.86	9.86

1. *D*eparture *from N*ormal
2. *Y*ear *to D*ate: Season accumulations are for April 1st to date

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 24th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	80	41	63	4	91	2690	326	0.43	-0.23	27.55	8.47
Glens Falls	78	32	58	1	59	2210	156	0.26	-0.44	26.88	8.00
Poughkeepsie	81	41	62	2	86	2797	307	0.13	-0.64	32.23	10.29
Mohawk Valley											
Utica	81	38	61	3	79	2327	177	0.40	-0.61	27.09	4.62
Champlain Valley											
Plattsburgh	82	40	60	4	73	2350	270	0.20	-0.47	19.99	1.51
St. Lawrence Valley											
Canton	81	39	60	4	70	2180	310	0.87	0.00	16.63	-3.18
Massena	81	37	60	4	70	2230	276	0.82	0.03	20.40	2.31
Great Lakes											
Buffalo	84	45	62	3	89	2683	397	1.47	0.70	20.88	1.20
Colden	80	39	58	0	59	2029	177	1.42	0.34	24.16	1.16
Niagara Falls	82	41	62	3	88	2572	282	1.46	0.64	18.98	-0.26
Rochester	84	44	65	5	105	2760	544	0.71	0.05	23.12	6.24
Watertown	81	36	61	5	80	2281	364	0.84	0.11	16.45	0.67
Central Lakes											
Dansville	82	41	60	-1	70	2344	121	0.50	-0.27	24.38	5.85
Geneva	81	41	61	2	76	2325	122	0.69	-0.06	23.47	5.18
Honeoye	83	38	60	-2	72	2308	-6	0.89	0.19	20.47	2.38
Ithaca	80	38	59	2	67	2165	174	0.22	-0.61	25.01	5.26
Penn Yan	80	42	62	3	83	2497	294	0.36	-0.39	17.38	-0.91
Syracuse	82	41	64	4	98	2613	375	0.66	-0.23	27.38	6.58
Warsaw	79	39	57	2	54	1946	243	1.53	0.62	28.36	6.65
Western Plateau											
Alfred	78	34	56	0	47	1787	108	0.58	-0.25	24.27	3.78
Elmira	81	37	60	3	74	2236	134	0.17	-0.53	25.76	7.21
Franklinville	79	38	56	2	50	1853	311	1.26	0.35	24.55	2.65
Sinclairville	80	39	58	2	59	2106	363	1.37	0.29	21.80	-2.69
Eastern Plateau											
Binghamton	76	39	60	2	69	2207	174	0.31	-0.46	30.34	10.70
Cobleskill	79	37	58	2	61	2100	208	0.31	-0.54	28.26	7.09
Morrisville	75	39	57	0	49	1940	140	0.50	-0.41	35.78	14.57
Norwich	80	38	58	2	58	2105	211	0.62	-0.25	32.43	11.41
Oneonta	84	40	61	5	75	2414	679	0.24	-0.60	31.70	9.20
Coastal											
Bridgehampton	79	34	63	0	91	2685	316	0.41	-0.36	37.76	17.13
New York	83	55	70	5	143	3719	570	0.10	-0.67	30.96	9.19

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