New York Berry News

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CURRANT EVENTS

September 17, 2008. *Using Hydrostackers to Grow Alpine and Day Neutral Strawberries*. Hudson NY. For more information or to register:

September 17, 2008. *Introduction to Growing Aronia*. Livingston, NY. For more information or to register:

September 18, 2008. *Appalachia Strawberry Field Day* Oakland, MD. Details follow below.

September 23, 30, October 7, 14, and 21: *Building a Successful Small Farm Operation* in Orleans County. Contact Paul Lehman of Niagara County CCE or Lynn O'Brien of Allegany/Cattaraugus County CCE for more information.

October 1, 2008. *Berry Season Wrap Up Meeting*, Chautauqua CCE, Jamestown, NY**.** Details follow.

October 2-3, 2008. I*ntroductory Workshops for Prospective Berry Growers*. Franklin, Jefferson, Lewis, and St. Lawrence Counties. Details follow in news brief below.

October 16, 2008. *Day-Neutral Strawberry Production Workshop* - Rock Springs, PA. Details follow in news brief below.

October 23, 2008. *Berry Pest Management Workshop*, Civil Defense Center, Route 54, Bath, NY**.** Details follow.

October 28-29, 2008. *Cornell Strategic Marketing Conference.* Wappingers Falls, NY. Updated conference information & registration materials now available at http://marketingpwt.aem.cornell.edu. For more information contact: Todd Schmit, Dept. of Applied Economics and Management, 607-255-3015, tms1@cornell.edu or Les Hulcoop, Cornell Cooperative Extension-Dutchess County, 845-677-8223, lch7@cornell.edu.

Nov. 6-8, 2008. *Southeast Strawberry Expo*, at the Hilton Charlotte University Place, Charlotte, NC. Includes Strawberry Plasticulture Workshop for New Growers, farm tour, educational sessions, and trade show. For more information, email info@ncstrawberry.com

Nov. 18, 2008. *Diagnosis, Visual Assessment and Management of Plant-Parasitic Nematodes of Vegetables and Small Fruit in the Northeast*, Lehigh County Cooperative Extension Office, Allentown, PA. For more information contact Beth Gugino at bkgugino@psu.edu.

Dec. 8-10, 2008. *North American Raspberry & Blackberry Conference*, in Grand Rapids, MI, as part of the Great Lakes Expo. More information, email info@raspberryblackberry.com.

Dec. 9-11, 2008. *Great Lakes Fruit, Vegetable and Farm Market Expo***,** DeVos Place Convention Center, Grand Rapids**,** http://www.glexpo.com/.

Feb. 3-5, 2009. *2009 Mid-Atlantic Fruit and Vegetable Convention*, Hershey Lodge and Convention Center, Hershey, PA. For more information contact William Troxell at 717-694-3596 or visit www.mafvc.org.

June 22-26, 2009: *The 10th International Rubus and Ribes Symposium. Zlatibor, Serbia*. Save the date!

Want to Grow Berries in the North Country? Start Here!

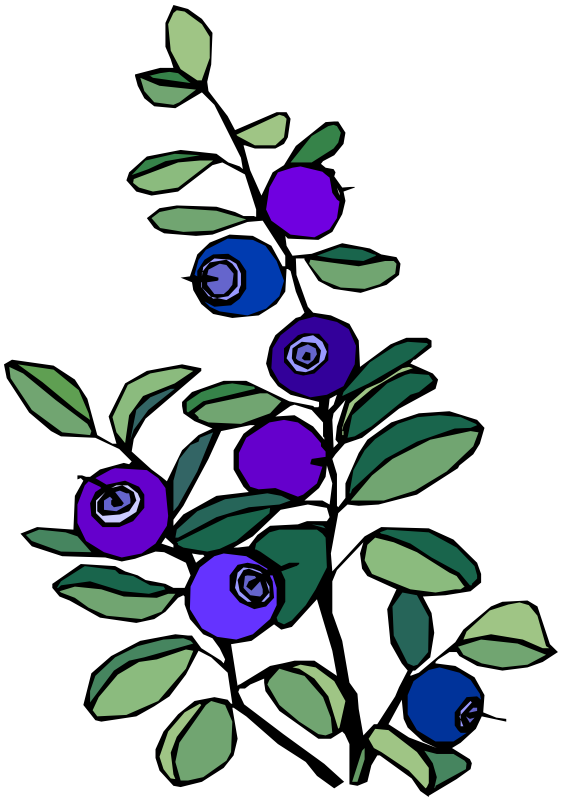
Learn about site selection, cultural considerations, marketing and potential profitability at one of four local workshops. Presentation will be made by the Cornell Berry Extension Support Specialist. Strawberries, blueberries, raspberries, currants, elderberries, and more will be discussed.

Thursday, October 2nd - 1:30 - 4:00 pm
CCE of Franklin County
355 West Main Street, Malone
518-483-7403

Thursday, October 2nd - 6:30 - 9:00 pm
CCE of St. Lawrence County
Extension Learning Farm Classroom
1894 State Hwy 68, Canton
315-379-9192

Friday, October 3rd - 9:00-11:30 am
CCE of Jefferson County
203 North Hamilton Street, Watertown
315-788-8450

Friday, October 3rd - 1:30 - 4:00 pm
CCE of Lewis County
County Office Bldg, Outer Stowe St., Lowville
315-376-5270



Registration is $10/farm enterprise. To register, please call the site where you will attend no later than September 30th.

This workshop is sponsored by:

Insert County CCE logo

N.Y. State Berry Growers Association

NYFVI NEW YORK FARM VIABILITY INSTITUTE, INC.

Cornell Cooperative Extension provides equal program and employment opportunities

Berry Season Wrap Up – Putting Those Berries To Bed!

Cornell Cooperative Extension of Chautauqua County is sponsoring an end-of-season berry workshop for commercial berry growers.

Wednesday, October 1, 2008
7:00-9:00 PM
Bratt Agricultural Center
Jamestown, NY

Come meet Cathy Heidenreich, Cornell Berry Extension Support Specialist for Western New York and learn from her about the latest on growing strawberries, raspberries, blackberries, blueberries, currants and gooseberries.

This two-hour program will include:

- Season wrap-up procedures and techniques, including weed management, fertilization, winter mulching, and much more.
- Resources that are available to small berry growers.
- An open discussion to help identify *your* needs and interests for future berry programming.

Light refreshments and door prizes provided.

This is a great chance to meet Cathy, and learn the latest information on New York berry production.

Free Registration is required
by Friday, September 26th:
Virginia Carlberg
(716) 664-9502 ext. 202

This program is made possible through CCE-Chautauqua County and the New York State Farm Viability Institute.

Cornell University
Cooperative Extension

NY farm viability
INSTITUTE

BERRY PEST MANAGEMENT WORKSHOP PLANNED

Cornell Cooperative Extension of Steuben County will host a Berry Pest Management workshop Thursday October 23rd at the Civil Defense Center, Route 54, in Bath from 6:30 until 8:45 PM.

Berry Extension Support Specialist Cathy Heidenreich will review berry pest management methods and resources, and introduce new management tactics, strategies, and products for pests found in berry crop production. An overview of the most common pests for each crop will be followed by a discussion of season long pest management strategies for each berry crop. DEC recertification credits pending.

Those wishing to receive credit must bring their pesticide license to the meeting. Registration is required by Friday October 17th.Cost to attend is $15 per person. This fee includes light refreshments and handouts.

For more information or to register contact CCE Steuben at 607-664-2300.

NEW YORK BERRY NEWS RECEIVES NACAA AWARD

New York Berry News was recently recognized for excellence in the use of communication media. The certificate of merit was awarded by the National Association of County Agricultural Agents as part of their annual convention held July 13-17, 2008, in Greensboro, North Carolina. NYBN was state winner, receiving the 2008 Communication Award for Team Newsletter. Many thanks to our contributing authors who make a team newsletter possible, and to our readers, who give us purpose and a reason to excel!

DAY-NEUTRAL STRAWBERRY PRODUCTION EVENTS

If are you growing or considering growing day-neutral strawberries, there are two occasions coming up in September and October where you can learn about them and share experiences with other growers. The first is in Oakland, MD at Harry Swartz's new farm on September 18, and the second will be at Penn State's Horticulture Research Farm at Rock Springs on October 16. You can attend either one. Please see the details on each below. These events are conducted as part of a three-year Northeast SARE Research and Education Grant, "An Integrated Approach to Developing a Day-Neutral Strawberry Production Industry".

Appalachia Strawberry Field Day Oakland, MD

September 18, 2008 5:30pm

This evening field event will feature research conducted through the above grant, which has focused on propagation and production of day neutral strawberries in an annual system. The system is designed to produce fruit during the summer months when local fruit is typically not available. The production system is a great fit for growers in cooler areas of the region as strawberries require cool summer temperatures. The goal of the project is to develop a system of propagating, growing and marketing high quality fruit throughout the summer months.

Topics:

- Variety Trial – Participants will be able to view one of two variety trials with 13 different day neutral varieties.
- Plastic Mulch Colors for Day Neutral Strawberries
- Post Planting Flower Removal
- Spring versus Fall Planting of Day Neutral Strawberries
- Production on 2nd Year Plantings
- Fertilization of Day Neutral Strawberries
- High Tunnel Production with June Bearing Plants

Speakers:

Dr. Harry Swartz, Associate Professor – Horticulture, University of Maryland
Kathy Demchak, Sr. Extension Associate – Horticulture, Penn State University
Dr. Lewis Jett, Extension Specialist – Horticulture, West Virginia University
Willie Lantz, Extension Educator, Maryland Cooperative Extension
Sherry Frick, Extension Program Assistant, Maryland Cooperative Extension

Location: The field day will be held at the newly established farm of Dr. Harry Swartz. The farm is located south of Oakland along Rt. 560 and the address is 4771 Gorman Road, Oakland, MD 21550.

Registration: The cost of the field day is free and includes a barbeque meal afterwards. If you are planning on attending please call the Garrett Co. extension office to register at 301-334-6960.

Day-Neutral Strawberry Production Workshop - Rock Springs, PA

October 16, 2008 10:00am – 3:30pm

Topics: Information will be presented both indoors and in the field, where growers can walk though our day-neutral cultivar experiment and see the performance of 12 different cultivars and selections. Results from earlier high tunnel experiments with other day-neutral cultivars and selections will be presented, as well as the topics discussed at the Maryland meeting as listed above.

Speakers: Presenters will be Kathy Demchak from Penn State University, and Dr. Harry Swartz and Willie Lantz from the University of Maryland.

Location: This event will be held at the Penn State's Horticulture Research Farm at Rock Springs, PA, which is located on Rt. 45, west of Pine Grove Mills, PA. Coming from the East, watch for the Russell E. Larson Agricultural Research Center sign on the right, then watch for lettered entrances, and turn left at Gate H. Coming from the West, this entrance is just after the ones for Ag Progress Days and will be on your right.

Registration: The event is free, and includes a lunch (probably involving strawberries), and refreshments. However, we do need to limit attendance to 45 people. Please call 814-863-7716 by October 9th and leave a message that states that you'll be attending the day-neutral workshop, your name, how many will be attending, and contact information, preferably an email address, or a phone number in case we need to contact you. A mailing address is third preference. We won't contact you unless something unusual happens that requires cancellation of the workshop, like a hurricane.

NATIONAL FARM SAFETY AND HEALTH WEEK, SEPTEMBER 21-27

The National Safety Council has declared the week of September 21 - 27, 2008 as National Farm Safety and Health Week. This annual promotional week commemorates the hard work, diligence, and sacrifices made by our nation's farmers and ranchers.

This year's safety theme is "Farm Safety - Protect Your Investment." As the message implies, personal well-being is important to the long-term sustainability of the farm operation.

On average, 27 Ohio farmers lose their life each year while working on the farm. That adds up to 276 people every decade. These fatalities are caused by accidental injury.

However, behind the injuries statistics lurk an even larger number of health concerns. Hearing, respiratory conditions, vision, skin, and the musculo-skeletal system are affected daily by the hard work and harsh environments the body endures while performing farm work. Ask anyone involved in agriculture, and they will tell you that farming is physically hard work. That physical wear and tear takes it toll in many ways.

Wearing the recommended safety gear, eating healthy, and proper exercise will help reduce the physical stress of farm work. It will also provide a more efficient worker, able to take on more work!

For the most part, farming is perceived as a healthy lifestyle. However, farm living also has several environmental and occupational hazards that are inherent to the daily routines. So take the necessary precautions, and "Protect Your Investment!"

(Reprinted from Ohio Fruit ICM News Volume 12 (26), September 3, 2008; original source: Ag Safety S.T.A.T. - Safe Tactics for Ag Today, Vol.1, No. 3, September 2008)

EMERGENCY MANAGEMENT TIP OF THE MONTH

To assist local fire departments in quickly assessing the best approach for managing an on-farm emergency or disaster, it is helpful for them to be familiar with the farm. Methods for familiarizing local responders with individual farms include the farm owner developing an emergency plan, storing that plan in an easily accessible place such as a tube attached to the outdoor light post, and hosting the local responders for a tour of the farm.

Many fire departments will assist farm owners with developing their emergency plan as well as house the emergency plan in a binder at the fire department. Having the plan on-site at the fire department will save valuable time as the dispatcher will be able to provide information to the crew while they are en route to the farm. This type of planning helps to decrease loss to the farm and increase safety of the responders. Please contact your local fire department for help in developing a farm emergency plan, providing them with a copy as well as the location of the plan stored on-site, and to schedule a familiarization tour.

(Reprinted from Ohio Fruit ICM News Volume 12 (26), September 3, 2008; original source: Aletha Reshan, Emergency Management Planning and Education Program Coordinator, Ag Safety S.T.A.T. - Safe Tactics for Ag Today, Vol.1, No. 3, September 2008)

CLEANSWEEP NEW YORK FALL 2008 PROGRAM

CleanSweepNY is an opportunity to dispose of unwanted and/or obsolete pesticides and chemicals. This opportunity is directed at agriculture, professional certified applicators, marinas, schools, golf courses, cemeteries, etc...

CleanSweepNY is administered by the New York State Department of Environmental Conservation and is supported by the New York State Department of Agriculture and Markets and Cornell Cooperative Extension.

Targeted Counties: Westchester, Rockland, Putnam, Orange, Delaware, Ulster and Sullivan Counties.

Others may participate; however, no onsite collections will be included in non-targeted counties.

When: During the week of Nov. 3, 2008.

Where: Collection locations to be determined.

Why: Safe and economical disposal of unwanted or unregistered pesticides. Elimination of potential hazards to first responders and HazMat team members. Elimination of potential for environmental contamination.

Cost: No charge to farmers. All others receive free 100 lb pesticide benefit. All non-pesticide disposal costs are on a per-pound basis at a nominal fee. Specific disposal costs can be viewed on **Cost Structure** page.

How: Pre-registration is mandatory. Registration packets will be mailed out via USPS upon request. Call 1-877-793-3769 to request a packet.

There is no enforcement potential for any product turned in as part of this collection program. Nine CleanSweepNY efforts have been conducted throughout New York State and 1,376 have registered with NO enforcement of any kind to any participant. Please do the right thing and participate!

Enrollment Forms help to identify:

- Contact information to communicate with holders
- Identity of pesticides held for collection
- Estimated weights and volumes of pesticides to be collected
- Unknowns to be collected
- Suspect packaging/containers for onsite collections

NYS IPM INVITES NOMINATIONS FOR 2008 EXCELLENCE IN IPM AWARDS

The New York State Integrated Pest Management (IPM) Program seeks nominations for its annual "Excellence in IPM Awards." Previous IPM award winners have worked with the NYS IPM Program, commodity groups, private organizations, Cornell Cooperative Extension, and in other settings to help develop and promote the use of IPM. We seek nominations for people in agricultural IPM (fruit, vegetables, ornamentals, and livestock and field crops) and community IPM (schools, homes, landscapes, turf, and municipalities). New Yorkers involved in communicating about IPM through the media are also eligible. For more details about previous award winners: http://nysipm.cornell.edu/awards/

Criteria

Candidates for Excellence in IPM Awards should be individuals or organizations in New York State whose work in IPM deserves special recognition. They might be awarded for: developing new IPM tools; evaluating IPM methods in their operations, businesses, or organizations; encouraging demonstrations and adoption of IPM; promoting IPM and bolstering the adoption of IPM practices.

What to Submit

To nominate an individual or an organization, you must meet one of these criteria or co-nominate with someone who does: be an employee of Cornell University or Cornell Cooperative Extension; serve on a NYS IPM Program committee. No self-nominations will be accepted. Re-nominations of people suggested in other years are welcome if the material is updated.

Please submit a hard-copy letter with the following information (no longer than two pages):

√ Your name, title, organization, address, telephone number, e-mail address, and affiliation with the nominee.

√ Nominee's name, title, organization, address, telephone number, and e-mail address. *It is appropriate to nominate a committee, organization or other type of group.

√ Reasons for the nomination, including a description of the nominee's operation (e.g., farm, consulting firm, business) if applicable, IPM philosophy, IPM innovations, and other activities relevant to IPM. If you are nominating an organization, describe the business products or services and its IPM philosophy and practices.

√ Suggestions for suitable venues for presenting the award, for example the statewide Fruit and Vegetable Expo or Empire Green Industry Show.

√ Photos of the nominee practicing IPM are appreciated (but not required) at the time of submission, or later if you are notified that your nominee has won an award.

Please attach:

• At least two letters of recommendation from people who have been positively affected by the nominee.
• Additional information (newspaper articles, letters, photographs, etc.) as appropriate.

Where to Submit

Submit hardcopy nominations by mail to: Dr. Donald Rutz, Director, NYS IPM Program, 630 W. North Street, Geneva, NY 14456

Deadline

Nominations must be received at the IPM Program office on or before September 19, 2008. Email submissions will not be accepted.

Determination of Award Winners

The NYS IPM Program staff work with Cornell Cooperative Extension, the NYS Department of Agriculture and Markets, the NYS Department of Environmental Conservation, and the IPM Operating Committee to identify Excellence in IPM Award winners from all categories of our program.

Presentation of Awards

IPM awards are traditionally presented at a professional meeting or conference, appropriate to the individual's area of expertise. Such events allow award winners to be recognized by their colleagues and friends—people who can greatly appreciate their achievements. Your suggestions on an appropriate venue for presentation are welcomed and greatly appreciated.

For additional information about the NYS IPM Program: http://www.nysipm.cornell.edu/

THE ROLLER IN THE RYE - MANAGING COVER CROPS WITH ROLLING AND CRIMPING TECHNIQUES

Laura McGinnis, Agricultural Research Service Information Staff, ARS News Service, USDA, (301) 504-1654, laura.mcginnis@ars.usda.gov

Farmers could soon be on a roll when it comes to preparing their fields for planting.

That's thanks to rolling machines—developed by Agricultural Research Service (ARS) scientists in Auburn, Alabama—that can quickly flatten mature, high-biomass cover crops such as rye.

Each roller consists of a long cylinder adorned with a series of evenly spaced, blunt, steel crimping bars, each about one-quarter-inch thick. As a standard tractor pulls the roller over the field, pressure from the bars flattens and damages the cover crop without cutting or uprooting it. Within 3 weeks, the rolled cover crop dries out, forming a mat of dead biomass into which farmers can plant cash crops such as cotton.

The rollers' design is based on similar machines that have been used in South America for decades. Since 2001, ARS has been doing research to find the best crimping roller design for southeastern conditions, and benefits from this research are now becoming more widely recognized.

Agricultural engineer Ted Kornecki and his colleagues compared three different roller designs. This roller has a traditional roller with straight horizontal bars.

Heads (and Stalks) Will Roll

The one-pass process has plenty of benefits. It saves money, reduces soil erosion and runoff, helps control weeds, conserves water in the soil, and decreases—or eliminates—the need for herbicides.

In the southern United States and other regions where water-use efficiency is a concern, cover-crop rollers can also help maximize water storage.

"The rollers have the potential to help some producers save a lot of money," says Randy Raper, an agricultural engineer at the ARS National Soil Dynamics Laboratory (NSDL) in Auburn. "Insufficient water results in lower yields, particularly here in the southern states, so any practice that stores water in the soil will result in greater crop productivity."

This roller has curved bars.

The rolling technology can extend drought resistance by as much as 2 weeks, help producers manage high-biomass cover crops, and facilitate planting in no-till fields, Raper says.

This roller has a smooth drum attached to a crimping bar to smash the rye down as the machine moves forward.

Tall cover crops like rye have many benefits for no-till farming. They prevent erosion, reduce moisture evaporation, limit runoff, and increase infiltration and soil water-storage capability. But planting a cash crop in a sea of unruly cereal grains can be daunting for producers who are new to the task. The roller simply reduces cover crops to a flat layer of mulch. A planter, running parallel to the roller's path, can plant seeds directly into the ground without significantly disturbing the biomass mat.

Because using a cover-crop roller can eliminate the herbicide required to kill a cover crop, it's an ideal tool for organic farmers or other managers who want to reduce or eliminate herbicide use, according to Chris Lawrence, an agronomist with the USDA Natural Resources Conservation Service. Lawrence has helped farmers in Virginia experiment with the ARS rollers for herbicide-free, no-till management. Lawrence worked with Raper and NSDL agricultural engineer Ted Kornecki to design rollers with specifications to address the needs of the local community.

Lawrence worked with one farmer who rolled his fields before planting no-

till certified-organic soybeans, with promising results. By using the rollers, the farmer was able to eliminate multiple tillage trips and dramatically reduce both tillage costs and erosion risk, compared to his normal clean-till planting practice.

The no-till beans weren't as tall as a heavily tilled control group, Lawrence says, and had lower yields as a result. But the reduction in labor and fuel costs led to overall savings.
"After harvest, we estimated that the rollers had saved the farmer an average of $50 per acre," he says.

Crimp My Rye

Auburn scientists have made several improvements to the original design, making rollers that are more effective and easier to use.
Kornecki and his colleagues compared the impact of three different roller designs (see photos at left). The first roller has a traditional design, with long, straight, horizontal bars. The second has diagonal bars that curve around the roller. The third has a smooth drum attached to a crimping bar that mashes the rye down as the machine moves forward.
NSDL scientists developed and patented the curved-bar roller and have a patent pending on the crimping roller design.
The scientists used each roller to flatten a rye cover crop and measured what percentage of the crimped plants died within 3 weeks. The scientists found that all three models killed enough rye—90 percent or more—to enable farmers to begin planting cash crops in the field. The third roller, which used the crimping bar, yielded the best results.
How does it work? The crimper uses a simple drum roller. As the machine rolls over the rye, a crimping bar attached to the drum rapidly pounds the flattened grain, damaging the stalks. The scientists also found that by spraying herbicide on every fourth crimp, they could kill 98 percent of the rye within a week, using 87 percent less Roundup (glyphosate) than would be required to kill nonrolled rye.

Crimping roller used for elevated beds (for one bed and two furrows) with a custom-designed crimping bar to reach both furrows and a row top. The soybean cover crop (chosen for its ability to fix nitrogen into the soil and form a dense crop canopy) is being rolled and crimped to kill it, forming a mat of dead biomass into which growers can plant a cash crop.

The NSDL team also examined the smoothness of each design. One drawback of the first cover-crop roller was excessive vibration, which could damage the tractor to which it's attached and irritate the people maneuvering it.

"For a small farm, it's less of a problem," Kornecki says. "But a smoother ride is obviously more desirable."

The scientists measured the vibrations of the rollers at various speeds and found that each model's vibrations increased with higher operating speeds. Both the curved-bar and the crimping roller provided smoother rides than the traditional, straight-bar roller, allowing the cover crop to absorb most of the vibrations before they were transferred to the frame of the machine.

"With the crimping roller, all the energy is transferred to the cover crop, rather than to the tractor," Kornecki says. "This reduces vibrations, and it kills the rye effectively."

Future studies will help scientists maximize the efficiency and comfort of these machines. Kornecki is also developing new models to address different farming configurations—including one that could be used for crops grown in elevated beds and a lightweight model with two drums.

"We're still fine-tuning the technology," Raper says. "But these machines could have a major impact on sustainable farming."

This research is part of Integrated Agricultural Systems (#207), an ARS national program described on the World Wide Web at www.nps.ars.usda.gov.

Ted S. Kornecki and Randy L. Raper are with the USDA-ARS National Soil Dynamics Laboratory, 411 S. Donahue Dr., Auburn, AL 36832; phone (334) 844-0908 [Kornecki], (334) 844-4654 [Raper], fax (334) 887-8597.

(Reprinted from: September 2008 issue of Agricultural Research magazine)

GROWING BLACK CURRANTS – A SUMMER MEETING SYNOPSIS

Laura McDermott, Berry Extension Support Specialist, Eastern NY, Washington County CCE, Hudson Falls, NY

On August 6th, Steven McKay, the Cornell Cooperative Extension small fruit specialist in the Hudson Valley, hosted a meeting at Walnut Grove Farm in Staatsburg, NY. Walnut Grove Farm is owned by Greg Quinn, who along with McKay, has been instrumental in fanning the growth of the Ribes (*Ribes spp.*) industry. 17 growers were in attendance, and judging from the level of enthusiasm, the planted acreage of currants may see a significant increase in the next few years.

Until April 2003, Ribes plants, which include currants and gooseberries, were banned in NYS. The Black Currant (*Ribes nigrum*), whose juice is as ubiquitous in Europe as apple juice is here, was the fruit most targeted as the alternate host for White Pine Blister Rust (*Cronartium ribicola*). It was thought that the rust disease was a major threat to the timber industry and therefore growing currants was prohibited.

Over the next 100 years, black currants fell into obscurity with American consumers. This is unfortunate, as these plants are well adapted to New York growing conditions and the fruit, especially black currant, has so much to offer consumers in the way of health benefits. Fresh Currants have an abundance of vitamins A, B and C, and minerals potassium, iron, and calcium. They are reported to have twice the antioxidants of blueberries.

In the 1990's interest in growing all types of Ribes, especially black currants gained some traction. More information about the epidemiology of White Pine Blister Rust (WPBR) had been uncovered. For instance, it was thought that WPBR spores could travel for miles, but research revealed that there are actually 5 different spore types that occur in a complete WPBR disease cycle. The teliospores are the spores that form on the Ribes plant and infect the pine. That spore is rather delicate and can rarely travel over 1000'. The aecial spores that travel from pines and infect Ribes can travel over 350 miles. The other interesting fact that contributes to the development of the WPBR on pines is the weather. The infection must occur during damp weather. Also, the moist needles on a white pine that are susceptible are rarely more than 9' from the ground. So a simple cultural control would be to remove all white pines within a 1000' radius and then limb up those trees so the lowest branches would not have any needles below 10' in height.

The Forest Service has developed a model that can predict Hazard Zones for WPBR and other diseases. Forest disease outbreaks are described in terms of rates of spread, severity, and ecological impacts. Hazard rating of different zones provides a means for combining these attributes into a relative index so that you can compare disease potential among sites. Rust is more difficult to characterize than other diseases due to its behavior which is strongly influenced by genetics, proximity of hosts and microclimate. For more information about WPBR and its control, see: http://plantclinic.cornell.edu/FactSheets/wpineblister/wpineblister.htm.

Once a potential grower has done their homework regarding WPBR, they need to focus on cultural requirements. While most Ribes can tolerate partial shade, Black Currants perform much better in full sun. They also need rich, well-drained, slightly acidic soil. Like other small fruits you should avoid frost pockets. Currants like plenty of water, so provide irrigation, preferably a drip system.

Currants can be planted in the fall – September until early October in all but the coldest locations of NYS, and also in early spring, before May. They should be planted in well prepared, improved soil. Consider the varieties carefully. 'Ben Sarek' is resistant to WPBR and 'Titania' is immune. Plant them slightly deeper (~2") than they grew in the nursery. This will help encourage suckering. Annual pruning increases yields and keeps plants manageable. Currants are pruned so that most fruit are borne on spurs of two- or three-year old wood. After the first full season, all but two or three stems are removed at ground level. The following winter this is repeated, at which point the bush will have two or three each of one and two-year old stems. The fourth season any stems more than three years old are cut away at their base. Most currants have self-fertile flowers, but a few cultivars are partially self-sterile. Some resources will recommend removing flowers during the first year, but according to Steven McKay, Cornell Cooperative Extension small fruit Specialist, this practice is not economically worthwhile.

Black Currants respond well to organic mulch, which helps with weed control and moisture retention. Common materials are wood chips and compost. Sawdust should be avoided as it encourages voles. Mulch should be replenished to maintain a 2-3" depth.

Ribes should not be given too much nitrogen. If they are to be machine harvested, growers may need to deprive them of nitrogen in order to stunt them a bit so they fit in harvester. Nitrogen needs are variety specific. Avoid fertilizers containing muriate of potash (potassium chloride).

To enlarge the plantation, many growers take cuttings. This is easy to do with black currants. Cuttings should be gathered in the fall, between mid-September and mid-October. Many growers at the meeting reported not even using rooting hormone and having very good success. Be aware that many of the newer varieties are patented and propagation of a patented variety is prohibited.

Depending upon the cultivar, fruits ripen from 70 to 100 days after blossoming. Wait for 90% of the berries to color before picking, or just as the berries begin to fall. Hopefully soluble solids will be above 15 Brix. Avoid picking when the fruit is wet, as this will negatively affect the length of storage. Currants can be mechanically harvested, and there are a few harvesters currently offering custom harvest for currant growers in the Hudson Valley. Remove field heat as quickly as possible, even for fruit that will go to juice. Quinn rents a Ryder truck with a refrigeration unit for the 2 week harvest period.

Currants have few pest problems. White Pine blister Rust is obviously a concern as is Powdery Mildew. Currant aphids, currant borers and the currant fruit fly can also be problems. A new disease that is being studied by Dr. Kerik Cox at Cornell is Currant Cane Dieback. Prune out all dead material in the early spring and refer to the Pest management guidelines for chemical control recommendations.

After we discussed growing these plants, Greg Quinn weighed in briefly about his advice for marketing. He encouraged growers to get the best price possible. His target price is between $2-$3/lb. He encouraged other growers to pursue all marketing options prior to dropping the price. He admitted that marketing takes more time and effort than does growing the crop, because the market is being created. He urged growers to really push the pencil and start ahead of your planting date, but he emphatically believes that this crop will be a big player in the area of health products. At this time, he can not begin to meet the demand, even for his own juice, so he imports concentrate from New Zealand and Europe.

As we left, Quinn gave us all a bottle of his black currant nectar called CurrantC. I had never tasted black currants before and had never had the juice. It was delicious! The bottle was similar in shape to a Snapple drink, but the color is really nice, deep purple. Many of the others said they mixed the nectar with a seltzer, but I drank it all straight and it was very refreshing, not too sweet.

For more information about growing black currants, see the websites listed below.

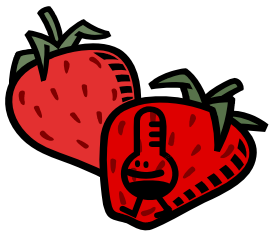
For more information about growing black currants, see the websites listed below.

1. Greg Quinn's farm – www.CurrantC.com.
2. Cornell resources (go to specialty fruit) : http://www.hort.cornell.edu/extension/commercial/fruit/berry.html
3. NYS Regulations and explanation of Fruiting Districts within NYS - http://www.dec.ny.gov/regulations/2359.html.

SEPTEMBER BERRY BAROMETER

HELPING TO KEEP YOU UP TO THE MARK!

Cathy Heidenreich, Western NY Berry Extension Support Specialist, Department of Horticulture, Cornell CALS, Ithaca, NY 14853



Its time to start looking forward to 2009. Be sure to take the time to review your notes and records for concerns that may need addressing next year so you are not caught off guard. Begin gathering needed information and making plans over the late fall and winter months on how best

to address them. Have plans and products in place when the 2009 season begins.

ALL BERRY CROPS:

1. **Weeds** – Start organizing those fall applications. Review weed problems and available products for their control. Purchase product and adjuvants as needed. Check labels to review timing and application requirements indicated (temperature, adjuvants, need for watering in after application etc.). Calibrate application equipment to be sure you are getting the most bang for your buck out of the products you apply! Not sure how? Boom sprayer calibration instructions follow, courtesy of Andrew Landers, NYSAES Geneva.

STRAWBERRIES:

Established plantings:

1. **Diseases** – Mid-summer heavy rainfall may have set the stage for problems with Phytophthora root rots on sites with a history of the disease. Diseased plants often wilt and collapse during warm dry weather. Plants appear stunted and off-color. Look for roots with a "rat-tail' appearance (lack of fine feeder roots) and main roots rotting upwards from the root tips. Cutting or scraping away the outer root surface above rotted areas may reveal a reddish root core (right). Infected plants usually occur in groups and are most often found in the lowest or wettest parts of the field. Treatment options include fall applications of Ridomil Gold, Alliette WDG, Prophyt, or Phostrol. Note: These products have proved effective in reducing disease severity in fields where Phytophthora occurs, but will not provide complete control, especially where susceptible cultivars are grown in wet soils. See berry pest management guidelines (http://ipmguidelines.org/BerryCrops/) for more information.
2. **Weeds** - Apply Dacthal, Sinbar, or Devrinol for winter annuals; Stinger for thistles. Remember you have one more shot at it in early November – 2,4-D may be an option if the weather is warm. Or later in November, Devrinol and/or Sinbar may be used before applying winter mulch. Check labels for timings, application rates and methods. Remember total product application/season restrictions apply for most products. See labels for details.

New plantings:

1. **Diseases** – same as above.
2. **Weeds** – Did you remember to cultivate in mid-August then apply Dacthal (12 lb/A)? You have one more shot at weed control in Late November with Devrinol and/or Sinbar before applying winter mulch.

BLUEBERRIES:

Established plantings:

1. **Weeds** – September into October – Sinbar after harvest (avoid contact with foliage), Devrinol, Solicam (if not applied in spring), Surflan, or Princep (low rate). November – Kerb for grasses. Casoron if needed apply uniformly in late fall when daily temperatures hold below 45°F. See berry pest management guidelines (http://ipmguidelines.org/BerryCrops/) for more information.
2. **Wildlife** – Watch for deer browse. Take immediate steps to deter feeding.

New plantings:

1. **Weeds** – Low rate of Princep in October for weed management. One more shot at it in late November with Kerb for grass control (before ground freezes) and/or Casoron for grasses or broadleaves- apply uniformly in late fall when daily temperatures hold below 45°F.
2. **Wildlife** – Watch for deer browse. Take immediate steps to deter feeding.

RASPBERRIES AND BLACKBERRIES:

Established plantings:

1. **Diseases –** Mid-summer heavy rainfall may have set the stage for problems with Phytophthora root rots on sites with a history of the disease. Infected plants often wilt and collapse just before harvest or during warm dry weather. Infected plants usually occur in groups and are most often found in the lowest or wettest parts of the field. Treatment options include fall applications of Ridomil Gold (Note: DO NOT apply within 45 days of harvest), Alliette 80 WP, Prophyt, or Phostrol. See berry pest management guidelines (http://ipmguidelines.org/BerryCrops/) for more information.
2. **Weeds** – September into October – Sinbar, Devrinol, Surflan, `Solicam (if not applied in spring). Check labels for timings, application rates and methods. Princep at high rate if not applied in spring. Remember total product application/season restrictions apply for most products. See labels for details. You have one more shot at it with Casoron in November if needed - apply uniformly in late fall when daily temperatures hold below 45°F.

New plantings:

1. **Weeds** – Limited options the planting year. October – low rate of Princep (Note: Not to be used on tissue culture plants). Late November, Casoron as above.

(This is the last Berry Barometer for the season. Hope you have found this monthly feature timely and helpful. Please send any suggestions or Comments to Cathy Heidenreich, mcm4@cornell.edu. Thanks!)

BOOM SPRAYER CALIBRATION

USE CLEAN WATER

Step 1. Check your tractor/sprayer speed

Formula: MPH = $\frac{\text{ft. traveled}}{\text{sec. traveled}} \times \frac{60}{88}$

Your tractor sprayer speed:

MPH = $\frac{\text{ft. traveled}}{\text{sec. traveled}} \times \frac{60}{88}$ = _____ =

Step 2. Record the inputs

	Your figures	Example
Nozzle type on your sprayer (all nozzles must be identical)	_____	110 04 flat fan
Recommended application volume (from manufacturer's label)	_____	20 GPA
Measured sprayer speed	_____	4 mph
Nozzle spacing	_____	20 inches

Step 3. Calculate the required nozzle output.

Formula: GPM = $\frac{\text{GPA } \mathbf{X} \text{ mph } \mathbf{X} \text{ nozzle spacing}}{\text{5940 (constant)}}$

Example: GPM = $\frac{20 \mathbf{X} 4 \mathbf{X} 20}{5940} = \frac{1600}{5940}$ = 0.27 GPM

Your figures: GPM = $\frac{\mathbf{X} \quad \mathbf{X}}{5940}$ = $\frac{_____}{5940}$ = GPM

Step 4. Operate the sprayer

Set the correct pressure at the gauge using the pressure regulating valve.
Collect and measure the output of each nozzle for one minute.
The output of each nozzle should be the approximately the same as calculated in Step 3 above. Remember 128 fl. ozs in one gallon. If output has been calculated at 0.27 GPM then output is 128 multiplied by 0.27 = 34.5 fl.ozs in one minute.
Replace all nozzle tips which are more than 10% inaccurate.

(Available on line at: http://www.nysaes.cornell.edu/ent/faculty/landers/pestapp/.)

FIRE BLIGHT UPDATE: INFORMATION FOR HIGH TUNNEL RASPBERRY GROWERS

Laura McDermott, Berry Extension Support Specialist, Eastern NY, Washington County CCE, Hudson Falls, NY

New York State tree fruit growers are familiar with Fire Blight caused by the bacteria *Erwinia amylovora*. A slightly different strain of this disease also affects other members of the rose family, including brambles. At this time, NY growers have only occasionally seen Fire Blight on raspberries and thornless blackberries in the field. But, since we are encouraging growers to consider growing raspberries in high tunnels, the fire blight challenge faced by growers in other regions is worth exploring.

Fire Blight has posed a problem for raspberry growers in Wisconsin, the mid west and Canada and has been reported in many states surrounding New York. Recently it was reported that a few high tunnel plantings of containerized raspberries outside of NYS had been infected by Fire Blight. The farm with the reported problem has been testing varieties such as Joan J, Polana and Himbo Top. All plants are containerized and grown in a high tunnel.

Resources: For information on this topic we looked to Dr. Steven Beer, with the Dept. of Plant Pathology at Cornell University. Dr. Beer has been working with Fire Blight for many years, and is presently involved with characterizing the genome of *E. amylovora* and genetically engineering more effective strains of non-pathogenic bacteria for use in biological control of fire blight. Dr. Beer's lab has been collecting samples of fire blight in raspberries for a few years as he tries to uncover the genetic basis of host-specificity of strains of the fire blight pathogen for plants of two subfamilies of the Rosaceae family.

The other source of information has been Dr. Gordon Braun who works for Agriculture and Agri-Food Canada in Nova Scotia. His work entails developing new crop management strategies to help control plant disease. He has been studying the epidemiology and molecular biology of *Erwinia amylovora* in raspberry in hopes of finding alternate control strategies for this disease in all fruit crops.

A concise fact sheet from the University of Wisconsin can be found at http://learningstore.uwex.edu/pdf/A3499.pdf.

Symptoms: Fire Blight in raspberry has two different infection phases; the flower infection phase and the primocane infection phase. *E. amylovora* survives through the winter by moving close to the soil line in infected primocanes. As new lateral shoots develop in the spring, the bacteria moves up the cane into the fruiting lateral. The first sign of infection that a grower might see would be the bacterial ooze which would appear as milky droplets on the laterals when it is very humid or wet. This is the source of inoculum for the flower infection phase. In the field, rain is considered the primary vector, but studies on fire blight in raspberries indicate that a wide assortment of insects including tarnished plant bug, ants, spittle bugs and earwigs were responsible for the disease spread. Insects certainly are moving the disease in a high tunnel.

Upon infection the mid-veins of leaves of the fruiting laterals, beginning at the leaf stem, become black. This veinal discoloration moves rapidly toward the leaf margins. Laterals will wilt, exhibiting the classic "shepherds crook" appearance (*photo right, courtesy of A. Schilder, Michigan State University*). The stalk of the fruit cluster becomes infected and turns black and the young, developing berries become hard and dry.

Infected fruiting laterals are also the source of bacteria that cause primocane infections. Stinging insects, like tarnished plant bug, have been implicated as vectors for these infections. The tender tissue of newly emerged canes succumbs quickly to infection. Just like the fruiting laterals, as the bacteria moves in the tissue, leaf tissue surrounding the veins blackens, the leaf withers and dies.

Management: At this point there are no chemical controls for Fire Blight on raspberries grown in a field, tunnel or greenhouse situation. A few biocontrol materials have been tested, but little information about efficacy is available and the materials are not labeled. Good cultural management is imperative.

1. Purchase and plant only certified, disease free plants from reliable nurseries.
2. Remove and destroy diseased canes as soon as you see them. Disinfest pruning shears with a 10% solution of household bleach between each cut. This strategy has the potential to make the problem worse, especially if pruning is not done with great care.
3. Remove all primocanes in the fall, so that there is no disease inoculum present in the spring. The disease does not overwinter in the soil or the crown of the plant. This strategy is a challenge to accomplish with a small planting.
4. Manage insect pests to avoid spread of the disease. In a high tunnel this could mean screening, but there is little information to suggest that this would decrease disease incidence or be economically feasible.
5. Fertilize appropriately. Vigorous growth is most at risk.
6. Orient rows and prune and thin plants to maximize air circulation around the plants. This will help lower the humidity within the canopy.
7. Destroy wild brambles as they may be the source of the fire blight inoculum.

Many cultivars were screened for their relative susceptibility to *E. amylovora* by Canadian researchers (HortScience 39(6):1189-1192, 2004). Just a few cultivars were found to have some degree of resistance but that resistance may be related to the amount of apical growth the plants produce. Short lengths of tender apical growth resulted in less fire blight infection.

WEATHER NOTES

NEW YORK CROP WEATHER SERVICE NOTES

Week ending August 10th: The week featured upper level disturbances providing showers and thunderstorms across much of the state each day with all locations receiving measureable amounts. Some locations received well above normal rainfall while others received less than the normal. A cold front pushed through Tuesday night and Wednesday cooling temperatures slightly. More cooling was noted by late in the week with the upper level low and associated cloudiness more or less stuck in place. High temperatures averaged a few degrees below normal each day with low temperatures at the start of the week being slightly above normal with a cooling trend through the week, so that lows by week's end were slightly below normal.

Week ending August 17th: A cold front along with an area of low pressure provided the region with rainfall to start the week. In its wake, cooler weather as high pressure moved in for the mid week period. A storm developed over the southeast United States and tracked northeast off the Atlantic seaboard Thursday and Friday. Although, some scattered showers and thunderstorms did occur across the Empire State. Then a few weak troughs of low pressure impacted the region the remainder of the week with widely scattered showers and thunderstorms. Temperatures averaged below normal with precipitation near normal.

Week ending August 24th: The week began with widely scattered thunderstorms across eastern New York, a few of which produced hail. A strong cold front crossed upstate New York from northwest to southeast on Monday into Monday night. Along this frontal boundary, a broken line of showers and thunderstorms brought locally heavy rainfall to some portions of the St. Lawrence Valley and the Adirondack Park. Behind this boundary a large area of high pressure slowly moved across the northeast. This brought dry weather and low humidity for the remainder of the week. Temperatures started the week around normal ahead of the frontal boundary, but the cool high pressure center brought below normal temperatures across much of the state for the middle of the week. Temperatures rebounded to near normal levels for the weekend, as the high pressure shifted offshore and allowed warmer southerly winds to return.

Week ending August31: The week began with a cold front tracking through the region. The cold front had no precipitation associated with it and temperatures cooled to slightly below normal for the first part of the week. High pressure controlled our weather through much of the week with temperatures gradually warming to a little above normal by the end of the week. Another cold front tracked through the region Saturday night pushing offshore Sunday. Once again, the cold front had no precipitation associated with it and high pressure built into the region Sunday.

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 E-mail 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:
www.nysaes.cornell.edu/pp/extension/tfabp

WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 10th, 2008

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	83	56	71	0	151	1955	257	0.45	-0.32	17.36	3.04
Glens Falls	81	50	67	-3	122	1552	65	1.98	1.17	16.40	2.53
Poughkeepsie	87	57	72	-1	153	2028	255	0.65	-0.19	18.52	1.74
Mohawk Valley											
Utica	77	52	64	-2	103	1233	67	2.91	1.88	21.33	2.25
Champlain Valley											
Plattsburgh	78	52	66	-3	115	1469	-47	1.04	0.13	17.05	3.94
St. Lawrence Valley											
Canton	78	54	66	-2	113	1515	167	1.90	0.99	17.72	3.92
Massena	79	55	67	-1	124	1482	53	0.71	-0.12	15.22	2.54
Great Lakes											
Buffalo	85	56	70	0	144	1762	144	0.94	0.04	13.48	-0.45
Colden	81	51	65	-3	105	1393	81	2.09	1.23	18.59	2.29
Niagara Falls	83	53	69	-2	130	1705	77	1.18	0.35	14.12	0.61
Rochester	85	56	69	0	138	1895	323	1.99	1.23	12.18	0.06
Watertown	82	56	68	-1	127	1527	170	1.81	1.14	15.16	4.40
Central Lakes											
Dansville	83	54	67	-3	124	1698	123	2.15	1.45	16.00	2.44
Geneva	82	56	67	-3	124	1676	116	2.33	1.64	14.67	1.17
Honeoye	83	53	67	-5	120	1615	-6	1.64	0.94	15.69	2.41
Ithaca	82	55	66	-2	115	1551	138	1.13	0.36	15.58	1.02
Penn Yan	83	58	70	0	138	1963	403	1.39	0.70	13.36	-0.14
Syracuse	84	57	69	-1	136	1822	230	1.55	0.78	15.19	-0.13
Warsaw	82	52	64	-3	100	1363	141	4.18	3.34	21.77	6.02
Western Plateau											
Alfred	79	50	63	-3	94	1216	15	1.88	1.11	15.41	0.22
Elmira	83	53	68	-2	124	1670	172	2.46	1.77	13.82	-0.21
Franklinville	81	49	64	-1	101	1273	174	1.09	0.24	16.44	0.52
Sinclairville	81	53	66	0	114	1442	207	1.43	0.46	16.78	-0.93
Eastern Plateau											
Binghamton	81	55	66	-3	116	1636	181	1.04	0.31	13.88	-0.78
Cobleskill	82	50	67	-1	122	1506	157	0.89	0.12	20.62	4.87
Morrisville	79	54	65	-2	109	1400	112	1.38	0.61	16.96	1.41
Norwich	83	50	67	-1	119	1464	112	0.28	-0.43	13.38	-2.24
Oneonta	90	52	69	3	135	1719	469	0.23	-0.61	13.27	-3.82
Coastal											
Bridgehampton	82	57	71	-2	146	1845	243	3.21	2.46	16.16	0.79
New York	88	66	77	1	190	2518	322	0.72	-0.12	13.59	-2.89

1. *D*eparture *from N*ormal
2. *Year 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, August 17th, 2008

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	78	55	67	-4	116	2071	232	2.16	1.35	19.52	4.39
Glens Falls	76	48	64	-5	100	1652	41	1.24	0.40	17.64	2.93
Poughkeepsie	81	56	68	-4	128	2156	235	1.83	1.02	20.35	2.76
Mohawk Valley											
Utica	77	50	61	-4	80	1313	45	2.57	1.47	23.90	3.72
Champlain Valley											
Plattsburgh	76	53	64	-4	103	1572	-67	0.33	-0.65	17.38	3.29
St. Lawrence Valley											
Canton	76	46	62	-5	86	1613	149	0.54	-0.42	16.50	1.74
Massena	77	46	63	-4	94	1576	28	0.11	-0.73	15.33	1.81
Great Lakes											
Buffalo	78	54	66	-4	114	1876	122	2.38	1.40	15.86	0.95
Colden	73	50	61	-6	79	1472	46	0.41	-0.50	19.00	1.79
Niagara Falls	79	52	65	-5	106	1811	48	0.93	0.03	15.05	0.64
Rochester	79	55	67	-2	116	2011	312	0.28	-0.49	12.46	-0.43
Watertown	77	48	63	-5	95	1622	144	0.58	-0.17	15.74	4.23
Central Lakes											
Dansville	78	52	65	-5	106	1804	97	0.33	-0.38	16.33	2.06
Geneva	77	54	65	-5	107	1783	91	0.55	-0.15	15.22	1.02
Honeoye	78	52	65	-6	104	1719	-41	0.86	0.13	16.55	2.54
Ithaca	77	48	63	-5	97	1648	114	0.21	-0.56	15.79	0.46
Penn Yan	78	54	66	-3	115	2078	386	0.70	0.00	14.06	-0.14
Syracuse	77	54	66	-3	115	1937	214	0.76	-0.01	15.95	-0.14
Warsaw	76	50	62	-4	84	1447	120	0.97	0.10	22.74	6.12
Western Plateau											
Alfred	75	47	60	-5	74	1290	-17	0.08	-0.71	15.49	-0.49
Elmira	78	50	64	-4	103	1773	148	0.17	-0.49	13.99	-0.70
Franklinville	75	49	61	-3	81	1354	158	0.46	-0.45	16.90	0.07
Sinclairville	76	51	63	-3	91	1533	190	0.65	-0.35	17.43	-1.28
Eastern Plateau											
Binghamton	75	50	64	-4	98	1734	156	1.19	0.43	15.07	-0.35
Cobleskill	76	52	63	-4	92	1597	132	1.03	0.26	21.65	5.13
Morrisville	76	50	63	-3	91	1491	93	1.28	0.50	18.24	1.91
Norwich	78	50	64	-4	97	1561	93	1.88	1.11	15.26	-1.13
Oneonta	80	51	65	-2	105	1824	467	1.18	0.34	14.45	-3.51
Coastal											
Bridgehampton	82	58	70	-2	143	1988	236	0.64	-0.13	16.83	0.66
New York	84	63	74	-2	170	2688	313	2.46	1.62	16.05	-1.27

1. *D*eparture *from N*ormal
2. *Year 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, August 24th, 2008

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	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	85	47	69	0	131	2202	233	0.00	-0.79	19.52	3.60
Glens Falls	83	44	65	-2	106	1758	32	1.65	0.81	19.29	3.74
Poughkeepsie	86	49	68	-2	129	2285	226	0.13	-0.64	20.48	2.12
Mohawk Valley											
Utica	79	43	62	-2	83	1396	36	0.58	-0.59	24.48	3.13
Champlain Valley											
Plattsburgh	87	43	66	-1	110	1682	-70	0.57	-0.40	17.95	2.89
St. Lawrence Valley											
Canton	83	43	65	-1	106	1719	149	1.32	0.34	17.82	2.08
Massena	87	45	66	2	115	1691	35	0.76	-0.09	16.09	1.72
Great Lakes											
Buffalo	88	51	71	3	146	2022	142	0.14	-0.84	16.00	0.11
Colden	83	43	65	-1	104	1576	44	0.40	-0.58	19.40	1.21
Niagara Falls	88	48	70	3	139	1950	61	0.23	-0.68	15.28	-0.04
Rochester	87	49	69	2	133	2144	325	0.29	-0.52	12.75	-0.95
Watertown	85	42	66	0	116	1738	149	0.84	0.04	16.58	4.27
Central Lakes											
Dansville	87	46	67	-1	121	1925	95	0.50	-0.27	16.83	1.79
Geneva	84	49	67	-1	119	1902	87	0.16	-0.57	15.38	0.45
Honeoye	86	44	68	-2	126	1845	-45	0.32	-0.45	16.87	2.09
Ithaca	84	42	65	-2	106	1765	108	0.22	-0.55	16.01	-0.09
Penn Yan	85	49	68	-1	131	2209	394	0.19	-0.54	14.25	-0.68
Syracuse	86	48	67	0	123	2060	215	0.51	-0.29	16.46	-0.43
Warsaw	85	44	65	2	105	1552	129	0.47	-0.44	23.21	5.68
Western Plateau											
Alfred	83	38	62	-2	89	1379	-24	0.23	-0.61	15.72	-1.10
Elmira	87	45	66	-2	110	1883	142	0.16	-0.54	14.15	-1.24
Franklinville	83	41	63	0	93	1447	162	1.36	0.45	18.26	0.52
Sinclairville	85	42	65	1	109	1642	199	0.31	-0.74	17.74	-2.02
Eastern Plateau											
Binghamton	82	48	66	-1	113	1847	155	0.28	-0.49	15.35	-0.84
Cobleskill	82	43	65	-1	103	1701	127	0.00	-0.80	21.65	4.33
Morrisville	81	46	64	-2	96	1587	87	0.09	-0.75	18.33	1.16
Norwich	84	43	64	-2	99	1660	84	0.25	-0.52	15.51	-1.65
Oneonta	90	46	66	3	116	1940	485	0.73	-0.11	15.18	-3.62
Coastal											
Bridgehampton	84	50	68	-3	125	2113	218	0.00	-0.81	16.83	-0.15
New York	88	61	75	2	180	2868	321	0.00	-0.84	16.05	-2.11

1. *D*eparture *from N*ormal
2. *Year 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, August 31st, 2008

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	*Low*	*Avg*	*DFN*[1]	*Week*	*YTD*[2]	*DFN*	*Week*	*DFN*	*YTD*	*DFN*
Hudson Valley											
Albany	83	48	68	2	129	2331	245	0.03	-0.74	19.55	2.86
Glens Falls	81	44	65	1	110	1868	42	0.01	-0.82	19.30	2.92
Poughkeepsie	83	50	68	-1	123	2408	224	0.27	-0.55	20.75	1.57
Mohawk Valley											
Utica	78	44	61	-1	78	1474	35	0.39	-0.85	24.87	2.28
Champlain Valley											
Plattsburgh	82	42	64	-1	101	1783	-69	0.07	-0.83	18.02	2.06
St. Lawrence Valley											
Canton	83	41	63	0	93	1823	160	0.14	-0.84	17.96	1.24
Massena	82	42	64	-1	97	1788	39	0.00	-0.91	16.09	0.81
Great Lakes											
Buffalo	83	51	67	1	124	2146	150	1.66	0.70	17.66	0.81
Colden	81	45	62	-2	86	1662	35	1.08	0.03	20.48	1.24
Niagara Falls	82	49	66	-1	112	2062	58	0.35	-0.59	15.63	-0.63
Rochester	85	48	66	0	115	2259	330	0.07	-0.70	12.82	-1.65
Watertown	81	46	64	-1	98	1836	148	0.51	-0.33	17.09	3.94
Central Lakes											
Dansville	86	46	64	-3	98	2023	80	1.38	0.61	18.21	2.40
Geneva	85	47	65	-3	103	2005	78	1.12	0.35	16.50	0.80
Honeoye	85	42	63	-5	95	1940	-70	0.94	0.17	17.81	2.26
Ithaca	84	43	63	-3	91	1845	97	0.38	-0.43	16.39	-0.52
Penn Yan	87	49	66	0	113	2322	395	2.01	1.24	16.26	0.56
Syracuse	87	47	66	-1	112	2172	215	0.37	-0.47	16.83	-0.90
Warsaw	84	46	63	1	93	1644	136	1.00	0.06	24.21	5.74
Western Plateau											
Alfred	83	41	60	-3	75	1454	-34	1.38	0.54	17.10	-0.56
Elmira	89	42	65	-2	103	1986	139	0.70	0.00	14.85	-1.24
Franklinville	83	43	61	-1	77	1524	160	0.77	-0.17	19.03	0.35
Sinclairville	82	45	63	0	93	1731	199	0.36	-0.73	18.10	-2.75
Eastern Plateau											
Binghamton	82	48	64	-1	101	1948	154	1.02	0.25	16.37	-0.59
Cobleskill	83	44	64	0	98	1799	130	0.34	-0.50	21.99	3.83
Morrisville	80	44	63	-1	89	1676	86	0.17	-0.71	18.50	0.45
Norwich	84	43	62	-2	87	1745	74	0.71	-0.13	16.22	-1.78
Oneonta	83	44	63	2	94	2034	492	0.15	-0.69	15.33	-4.31
Coastal											
Bridgehampton	81	51	67	-2	124	2237	210	0.40	-0.44	17.23	-0.59
New York	85	62	74	2	172	3040	331	1.89	1.05	17.94	-1.06

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