Reducing Bird Damage to Fruit Crops in New York State

Heidi Henrichs, Graduate Student, Cornell University Department of Natural Resources

It has been estimated that birds are responsible for over $6.6 million annually in New York sweet cherries, blueberries, apples and wine grapes. Bird damage has been identified as one of a number of significant factors which affect grower profit here in New York State. An ongoing USDA-SCRI project is seeking to identify effective, affordable, and environmentally-friendly deterrent techniques that would keep birds away from crops. This study encompasses economic, ecological, and opinion data from New York, Michigan, and the Pacific Northwest.

In 2012, 81 different sites throughout central and western New York were assessed for bird damage through the use of fruit and bird surveys. A big thank you to all growers who gave us access to your plantings and fields - this work would be impossible without you! Of our 23 sweet cherry sites, bird damage was estimated to be an overall weighted average of 27%. Within 12 different Blue Crop blueberry plantings, birds were responsible for damage in 22% of the fruit. Honeycrisp apples had an overall weighted average of 2% and Pinot Noir wine grapes had a weighted overall average of about 4% bird damage. It is important to remember that both sweet cherry and apple crops suffered from severe frost damage in late April of that year, which may have affected our results. Location of fruit and specific plants was taken into account - whether a fruit is more susceptible to bird damage on the edge of a planting versus interior. These edge effect patterns, although present in our data, were not statistically significant.

Bird survey data was collected through the use of fifteen minute point counts. European starlings (Sturnus vulgaris), cedar waxwings (Bombycilla cedrorum), and American robins (Turdus migratorius) seem to be responsible for the majority of damage in sweet cherries and blueberries. Along with those four, chipping sparrows (Spizella passerine) and American goldfinches (Spinus tristis) were observed foraging on wine grapes as well. American crows (Corvus

Blueberry bird damage; photo C. Heidenreich
Reducing Bird Damage (continued)

brachyrhynchos) and blue jays (Cyanocitta cristata) were the primary ‘culprits’ for bird damage in Honeycrisp apples.

During this past summer of 2013, we continued our research in all four crops, adding more extensive bird survey techniques, as well as pilot testing of deterrent methods. Bird distress callers, a speaker system which broadcasts distress, alarm and predator calls, were personalized for each site individually, based on data from 2012 as well as surrounding landscape. These, along with hawk kites, were tested in sweet cherries and Honeycrisp apples.

It has often been assumed that utilizing more than one technique increasing effectiveness, and this trial sought to test this theory, in addition to the effectiveness of these deterrents individually.

Our most novel technique that we tested this past summer were the air dancers, which are inflatable, flexible fabric, colorful “men”, which are powered by a fan to “dance” around. These air dancers are most often associated with used car lots and sales!

Air dancers were tested in Blue crop blueberry and Pinot noir wine grape plantings through the Finger Lakes region. During the fall, we also tested the effectiveness of moving deterrent techniques around to different locations every couple days, a way to examine how long it takes for birds to familiarize themselves with deterrents. These results are still being analyzed, but will be publicized in the February 2014 edition of New York Berry News, so stay tuned!

That’s a Berry Good Question – SWD and Blueberry Varieties for Organic Production

Cathy Heidenreich, Cornell University and Kathy Demchak, The Pennsylvania State University

Q: We were really hit hard with SWD on our organic blueberries…everything harvested after mid-August was affected. We’re planting more blueberry plants in 2014, and I need to order now. Are there varieties or other considerations I should make in choosing varieties in terms of managing SWD?

A: Note that the timing and extent of SWD infestations
will vary depending on location and spray programs. However, for all growers considering planting blueberries (and actually, this applies to any mid to late summer berry crop), it makes sense to utilize varieties that ripen before SWD numbers soar. This way you can hopefully avoid SWD issues for at least a portion of the harvest period.

We were interested in different people’s thoughts on early and early-midseason varieties, so we had a little conversation via email. Dr. Eric Hanson (Michigan State University) had these top picks:

**Early season:** Earliblue (not good for frost pockets), Reka, Duke, and Patriot.

**Early-mid season:** Draper, Huron, Bluecrop (in order of ripening) and possibly Blue Ribbon, a new introduction from Fall Creek.

Kathy Demchak added these thoughts:

When we grew Reka, it was productive, but the berry size was really tiny on 2 of our 4 plants and overall, berry size tended to be smaller. Maybe that was just its tendency to overcrop and we should have pruned differently. Birds also seemed to prefer Reka, maybe because the berries were bite-size for a bird, or maybe they just liked the flavor better. Mark Ehlenfeldt recommended it for our blueberry school last year.

I personally found Duke to be too lacking in flavor, but feel pretty good about Patriot and Bluecrop. You'd need at least one or two SWD sprays to make it through harvest on Bluecrop. When we incubated Bluecrop berries from our research plots starting during the second week of harvest in 2013 (note that this is without any sprays), we found 0 SWD per berry on July 18, then 0.08 per berry on July 24, increasing to 0.98 per berry on July 31. This backs up what the grower mentioned – that anything from mid-August on was pretty well infested. The date when heavy infestation is noticed will likely be earlier the further South you go.

So then we floated the question past Mark Ehlenfeldt, USDA-ARS blueberry breeder, who was a wealth of information, which follows:

Breeders are always hesitant to give an unequivocal answer, because we know there is no perfect variety, and a lot depends on the locale and the grower. That being said, here are some useful thoughts (hopefully followed by the descriptions. Expanded versions of the info in italics below can be found in the Mid-Atlantic Berry Guide

**Duke.** For more northern climates like ours, Duke has the most proven productivity record. Duke’s major down-side is its mild flavor. Duke’s flavor improves after a day or two in storage, but will never be a “wow” berry. Nonetheless, there are people who like the mild flavor of Duke and its crispness. Berry Guide comments: Duke is vigorous and blooms late, avoiding early frosts, but ripens relatively early. It starts producing quickly after planting. Harvest can be completed in two or three pickings. Duke is moderately resistant to anthracnose; has good resistance to mummy blight (primary shoot infection); and is moderately susceptible to mummy berry fruit infection. Stem blight problems have also been documented.

**Draper.** Draper is an offspring of Duke and is not as early ripening, but has better flavor. I haven’t seen any fully-mature fields of Draper in NJ, but the young ones look pretty good and will probably have good productivity. Some of our disease screening studies have suggested Draper is susceptible to mummy berry blight, but field performance may be better than the screening results which were done with high levels of inoculum Timing factors also come into play with blight infection, but I would still assume it’s less resistant than Duke. (As a side note, we’ve had very little mummy berry in NJ for about the last 5 years, although this spring there was a bit of a rebound with the cool wet weather). There are easy cultural practices for organic growers to control mummy berry, as long as there isn’t uncontrollable outside inoculum (i.e. wooded areas with mummy berry). Mid-Atlantic Berry Guide comments: Released in 2004 from the breeding program at Michigan State. Ripens slightly later than Duke, but with better flavor. Relatively susceptible to mummy berry blight.

**Reka.** I did mention Reka as a “best bet” as Kathy stated, and I stand by that recommendation. Reka does have a tendency to crop heavily and fruit size can be small as a result. Thus, it becomes a cultivar that needs to be managed more aggressively. Fruit area bit dark, and the flavor, to me, is just average, but it grows well in many places and has “average” to “better than average” disease resistances. Berry Guide comments: From New Zealand. Upright, very vigorous habit that has been very productive where grown. Berries are small and deep blue with a spicy flavor. Average resistance to anthracnose, relatively resistant to both phases
SWD and Blueberry Varieties for Organic Production (continued)

of mummy berry.

Now for a few others:

**Bluetta.** I have occasionally seen really nice plots of Bluetta. The fruit was at a perfect stage of development and was firm, beautiful, and flavorful. It made me see why someone released it originally. Even now, I think it may be the earliest-ripening blueberry. Its downsides are included in the comments below. *Mid-Atlantic Berry Guide comments:* Bluetta - Bush is compact, low growing, and of medium vigor. *Fruit is medium-sized, soft, and blue-black with fair flavor. Consistent production may be a problem. Moderately resistant to mummy berry disease; highly susceptible to anthracnose and red ringspot virus.*

**Hannah’s Choice.** Hannah’s Choice is a variety with significant potential, and delicious fruit, but performs variably in different locales. A nice variety if it can be grown reliably. *Mid-Atlantic Berry Guide comments:* Fruit has superior firmness, sweetness, and flavor with peachy overtones. Large first-pick berries, with some size decrease in later picks. Relatively resistant to anthracnose; average resistance to both phases of mummy berry. Less productive in some areas than others.

**Sweetheart.** Sweetheart is an early variety, with perhaps the best flavor in early-season fruit, but needs to develop a large plant before yielding ability is fully apparent. Many people will probably judge this plant too early and dismiss it. Even after it “sizes-up” it will need good management to keep fruit size up. It’s too early to know if it performs equally well in all locales. *Mid-Atlantic Berry Guide comments:* A new productive variety with excellent flavor that holds up in storage. Can overcrop. Cross-pollinate and prune assertively to maintain fruit size. Not precocious like Duke.

**Bluejay.** Bluejay is early-ripening, and is one of our standards for mummy berry resistance. It’s another variety that would be excellent if one could get it to produce consistently. But we don’t see that consistency here in NJ.

**Spartan.** Some growers here in NJ grow modest amounts of Spartan as an early variety that tastes better than Duke. For me, it hasn’t grown very well, nor been very productive, probably due to soil issues, and it doesn’t do very well on amended upland soils.

**Huron.** We only have some small plants, so I haven’t been able to judge them very much. Below are a few notes from the plant patent (with my highlights and comments). The patent gives no indications as to disease resistance.

> It is exceptionally late flowering and was one of the few early to mid-season genotypes to survive a late frost in the mid-1990s. *Huron* also has excellent winter hardness, as it has routinely been challenged with mid-winter temperatures below -20 C.*

> “In the trials conducted in Michigan at Grand Junction, ‘Huron’ was consistently one of the top rated advanced selections. It had among the highest fruit load of any of the early to midseason cultivars and the best flavor. The average date of first harvest was 5d before ‘Draper’ and 6d after ‘Duke’. The fruit of ‘Huron’ was slightly softer than ‘Draper’ and much firmer than ‘Bluecrop’. ‘Huron’ fruit were smaller than ‘Draper’, but larger than ‘Duke’ and ‘Bluecrop’. Its fruit color was similar to ‘Duke’, but a little darker than ‘Bluecrop’ and ‘Draper’. ‘Huron’ fruit had a storage life as long as ‘Draper’, which was several weeks longer than ‘Duke’ and ‘Bluecrop’. ‘Huron’ had the second highest levels of soluble solids next to ‘Draper’ and the second lowest acidity next to ‘Duke’.*

“Blueberry growers in Michigan and the cooler production regions across the USA, Europe, and Canada will find ‘Huron’ desirable as a new early northern highbush variety. However, some fruit pedicels of *Huron* fruit remain attached in very hot weather. The fruit of ‘Huron’ also develops sugar slowly and if picked too early can be very tart. In addition, the fruit clusters of ‘Huron’ are relatively tight, which may reduce picking efficiency.”

**Mark’s bottom line (mostly on consistency and productivity):**

**Top picks (still):** Duke, Draper, and Reka.

**Wild cards:** Hannah’s Choice, Sweetheart, Huron, and Bluejay.

**Bottom picks (for me):** Spartan and Bluetta
2014 Cornell Pest Management Guidelines for Berry Crops
Now Available

Mike Helms, Cornell University Pesticide Management Education Program (PMEP)

The 2014 edition of the Cornell Pest Management Guidelines for Berry Crops is now available. This annual publication provides up-to-date pest management and crop production information for blueberry, bramble (raspberry and blackberry), strawberry, ribes (currant and gooseberry), cranberry, elderberry, and Juneberry (Saskatoon) production in New York State.

Information on wildlife management and harvesting, handling, and transporting berry crops is also included.

This publication has been designed as a practical guide for berry crop producers, crop consultants, ag chemical dealers, and others who advise berry crop producers.

In addition to the annually revised pesticide and crop production information, the following highlighted changes in this edition of the Berry Guidelines that will benefit berry producers include:

- Information on forthcoming pesticide label requirements for pollinator protection.
- Updated information on recycling agricultural plastics.
- A new weed control section on herbicide active ingredients and the weeds controlled.
- Updated spotted wing drosophila control information listed for each crop.
- Addition of the emerging bramble pest blackberry psyllid.

The 2014 Cornell Pest Management Guidelines for Berry Crops can be obtained through your local Cornell Cooperative Extension office or directly from the Cornell Store at Cornell University.

To order from the Cornell Store, call (800) 624-4080 or order online at http://store.cornell.edu/c-874-pmep-manuals-and-guidelines.aspx.

Cost for the Guide is $28 plus shipping.

New Website Promotes Hydroponic Strawberry Production

Looking for information on hydroponic strawberry production? A new University of Arizona electronic resource provides a comprehensive overview on this production system. The new website, located at: http://cals.arizona.edu/strawberry/Hydroponic_Strawberry_Information_Website/ contains information on controlled environment agriculture (CEA) basics, propagation, substrates, irrigation, pollination, and fertilization. Also included on the site are links to additional resources, related educational events and a project blog where you can track project progress.

CEA provides opportunities to produce strawberry fruit in a sustainable manner. Both aerial and root zone environments can be controlled in CEA and maintained in the optimum range to maximize the productivity of strawberry plants. Nutrient solution can be recycled to save water and reduce fertilizer use, making resource use even more efficient. Use of substrate/hydroponics eliminates the necessity of soil fumigation.
Greenhouse structures exclude insect pests, reducing or eliminating the necessity of pesticide application. Strawberries are produced commercially in such sustainable ways in greenhouses in places like Japan and Europe. The goal of the new University of Arizona project is to establish sustainable off-season hydroponic strawberry production in the desert southwest where there currently is very limited production of strawberry but there are strong greenhouse industries that successfully conduct year-round production of high quality tomato yet experience ever-increasing pressure for product diversification due to the aggressive price competition for the current products (i.e., tomato).

The new website purposes to serve current and future greenhouse growers by introducing strawberry as value-added crop in the desert southwestern US and beyond. The key information presented on the website is from the new project at the University of Arizona as well as relevant literature.

The new project is funded by a grant from the Walmart Foundation and administered by the University of Arkansas System Division of Agriculture Center for Agricultural and Rural Sustainability.

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The 2014 Becker Forum
Building the Agricultural Workforce of the Future
Doubletree Hotel, East Syracuse, NY
January 20, 2014 – 9:00 am – 4:00 pm

Program:
8:15 a.m. Registration and coffee
9:00 a.m. Welcome
9:15 a.m. Immigration Policy and Politics 2014 - Craig Regelbrugge, Co-Chair, Agriculture Coalition for Immigration Reform, Washington, DC
10:10 a.m. The View from Western Growers - Ken Barbic, Sr. Director, Federal Government Affairs, Western Growers
11:05 a.m. Break
11:20 a.m. Welcoming Immigrants in our Communities – Rachel Steinhardt, Deputy Director, Welcoming America, Decatur, GA
12:15 p.m. Lunch
1:20 p.m. The Politics of Overtime Pay and Collective Bargaining in NY Agriculture - Dale Stein, Stein Farms, LeRoy, NY
1:50 p.m. Reforming Agricultural Immigration Policies: Current Developments - Lynnette Jacquez, CJ Lake, LLC, Washington, DC, Farm Credit East Featured Speaker
2:45 p.m. Break
3:00 p.m. Producer Panel: How will we staff farm businesses in the future?
4:00 p.m. Adjourn
4:15- Leaders Forum: How to Impact
5:00 p.m. Agricultural Labor Policies - Facilitator: Paul Baker, Executive Director Agricultural Affiliates, and Director New York State Horticulture Society

More information or to register:
http://nysvga.org/expo/information/
Using the Berry Farm Business Summary (BFBS) to Improve Your Bottom Line

Are you confident your commercial berry business is maximizing your return on investment? Is it thriving, or merely surviving? Are berries an asset on your ledger or really a liability?

If you’d like help answering these questions, plan to attend one of the 5 regional berry crop economics workshops using the information and resources generated from Stage 1 of the project, “Building a Better Bottom Line for NYS Berry Growers,” funded by New York Farm Viability Institute’s Ag Innovation Center.

The purpose of the project is to assist berry growers in evaluating their return on investment (ROI). The project is led by Dr. Marvin Pritts, professor and chair of the Cornell University’s Department of Horticulture. Project team members include: Dr. Bradley Rickard, a professor in the School of Applied Economics and Management, Dan Welch, FarmNet Business and Succession Planning Coordinator and graduate students Peixun Fang and Jianwei Xing from the Cornell’s Charles H. Dyson School of Applied Economics and Management. Additional team members are: Cathy Heidenreich, Cornell Department of Horticulture, Alison De Marree, Lake Ontario Fruit Program, Ginny Carlberg, CCE Chautauqua County, Sharon Bachman and Megan Burley, CCE Erie County, Sandra Buxton, CCE Washington County, Katherine Loeck, CCE Tioga County, and Stephanie Mehlenbacher, CCE Steuben County.

BFBS Workshops “Using the Berry Farm Business Summary Results to Improve your Bottom Line

Presentation topics
- Introduction to Financial Statements
- Record Keeping in 2014
- Farm Business Summary History
- Analysis and Application - the Data for the First Year of the BFBS
- Additional topics per location (see chart below)

Regional Workshop Locations and Times

<table>
<thead>
<tr>
<th>Date and time</th>
<th>Location</th>
<th>Contact person(s)/How to register</th>
<th>Additional presentation topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 31, 2014</td>
<td>CCE Saratoga County 50 West High Street Ballston Spa, NY</td>
<td>Contact: Laura McDermott, CCE ENYCHP <a href="mailto:Lgm4@cornell.edu">Lgm4@cornell.edu</a>; 518-746-2562 To Register: Marcie Vohnoutka, CCE ENYCHP, 518-272-4210; <a href="mailto:mmp74@cornell.edu">mmp74@cornell.edu</a>; register on-line at <a href="http://cdvsfp.cce.cornell.edu/">http://cdvsfp.cce.cornell.edu/</a></td>
<td>Using Social Media to Reach New Customers</td>
</tr>
<tr>
<td>February 6, 2013</td>
<td>CCE Chemung County Room 110 425 Pennsylvania Ave Elmira, NY 14904</td>
<td>Stephanie Mehlenbacher 507-664-2300 or <a href="mailto:sms64@cornell.edu">sms64@cornell.edu</a></td>
<td>Crop Insurance</td>
</tr>
<tr>
<td>February 10, 2014</td>
<td>Brant Town Hall Cafeteria, 1272 Brant-North Collins Rd., Brant, New York 14027</td>
<td>Contact/Registration: Virginia Carlberg (716) 664-9502 x 202 <a href="mailto:vec22@cornell.edu">vec22@cornell.edu</a></td>
<td>Using Social Media to Reach New Customers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact/Registration: Megan Burley (716) 652-5400 ext.138 <a href="mailto:msb347@cornell.edu">msb347@cornell.edu</a></td>
<td>Pest Management Decisions and Your Business: Analyzing the Costs and Benefits of Different Options</td>
</tr>
<tr>
<td>February 13, 2014</td>
<td>Garden Plaza Hotel 503 Washington Avenue, Kingston, NY 12401</td>
<td>Contact: Laura McDermott, CCE ENYCHP <a href="mailto:Lgm4@cornell.edu">Lgm4@cornell.edu</a>; 518-746-2562 To Register: Marcie Vohnoutka, CCE ENYCHP, 518-272-4210; <a href="mailto:mmp74@cornell.edu">mmp74@cornell.edu</a>; register on-line at <a href="http://cdvsfp.cce.cornell.edu/">http://cdvsfp.cce.cornell.edu/</a></td>
<td>HV fruit school morning berry session with DEC credits</td>
</tr>
<tr>
<td>March 19, 2014</td>
<td>CCE Monroe County Auditorium 249 Highland Avenue, Rochester, NY 14620</td>
<td>Contact: Alison De Marree To Register: Kim Hazel (585) 798-4265 - ext. 26. Registration form in Fruit Notes-Lake Ontario Fruit Program</td>
<td>Finding &amp; Managing Berry Labor</td>
</tr>
</tbody>
</table>
Using the Berry Farm Business Summary (BFBS) to Improve Your Bottom Line (continued)

Why a berry farm business summary?
Berry project team members are building on the Cornell-developed Fruit Farm Business Summary (FFBS), which has helped tree fruit growers improve their return on investment (ROI) for more than a decade. According to a study by Dyson School professor emeritus Gerald White, the FFBS “identifies the business and financial information they (growers) need and provides a framework for use in identifying and evaluating the strengths and weaknesses of the farm business.”

Experience with tree fruit growers using FFBS shows they quickly identify practices that are more costly than state benchmarks and address why their individual costs are higher. Early in the process, growers often make changes that immediately improve their bottom line. Participating growers also learn which components of their operation should be expanded or contracted to improve return on investment (ROI). Participating berry growers should reap the same rewards as their tree-fruit colleagues.

About the Project
During Stage 1, the project team enlisted 10 commercial berry growers statewide to participate in berry farm business summaries. Participating farm operations needed to have been in business the past three years, and had sales in 2012, preferably producing at least two berry crops. Extension educators worked with 10 growers to collect economic information for the berry farm business summaries. Dyson School team members compiled, analyzed and summarized the data collected. Extension Educators are now in the process of discussing project results with individual participants. Compiled information from the project will be shared during the regional workshops. We are also in the process of collecting crop production data to develop crop budgets for each of the 3 major NYS berry crops including strawberries, blueberries and raspberries. Statewide benchmark enterprise budgets will also be available after the analyses are completed.

How Can I Participate?
We are seeking new grower participants for the 2013 fiscal year to increase the total number of participating farms to 24. Please note: All information collected is kept strictly confidential. Budgets generated will not be attributed to specific farms. Instead, they will provide benchmarks (statewide averages calculated from collected data) that will help participants evaluate their business performance. In return for their participation, growers will receive a one-on-one review of their berry farm business summary with their educator as well as crop budgets and other resources related to the project. Contact the closest CCE team member to your farm from the contact list above or speak with one of them at your regional workshop to find out more.
Business Management for Direct Marketers

Program includes:
- Farm Business Summary History
- Introduction to Financial Statements
- Using the Berry Farm Business Summary Results to Improve Your Bottom Line
- Using Social Media to Reach New Customers
- Recordkeeping in 2014

Speakers include:
- Sandra Buxton, CCE CAAHP
- Megan Burley, CCE Erie County
- Dan Welch, NY Farm Net

Friday, January 31st
9:00 am to 12 noon
$10/person—Please pre-register

Contact information below

Cornell Cooperative Extension of Saratoga County
50 West High Street, Ballston Spa, NY 12020

NAME: _______________________________________________________________________________________________________
FARM/BUSINESS NAME: _________________________________________________________________________________________
ADDRESS: ______________________________________________________________________________________________________
TELEPHONE: ____________________________________    E-MAIL: ______________________________________________________

To pre-register, complete this form and return to: Marcie Vohnoutka, CCE Rensselaer County, 61 State St., Troy, NY 12180. Please make checks payable to “CCE CDVP”. For more information, contact Marcie Vohnoutka 518-272-4210 or email mmp74@cornell.edu. To register online, please visit: http://cdvsfp.cce.cornell.edu/
Nova Scotia-based Berry farm to hold presentation to enlighten local growers about the many benefits of the Haskap Berry.

On February 14th at 1:00 at Cornell Cooperative Extension in Ithaca, NY, pioneering berry farm LaHave Natural Farms will be holding a small exposition for local growers to learn about the Haskap Berry—a fruit that is relatively new to the North American market and which could have a huge economic impact on a region like the Fingerlakes.

Originating in Siberia, the Haskap made a big splash in Japan before making its way to this continent. A member of the honeysuckle family, the Haskap has a few distinct advantages when it comes to commercial viability. The first is its unique and sensuous taste; the second is its natural deep-blue colour; and third, and perhaps most importantly, it provides remarkable health benefits.

The versatile berry is not difficult to grow. We recommend planting 1,000 plants per acre, which, when mature (in year 4 or 5), will yield 8,000 to 10,000 pounds of tasty and nutritious berries in June to early July. The early harvest date means these berries set the stage for summer-ripening before most fruit is ready to be picked. The plants are very well suited for mechanical harvesting and can use the same equipment as a highbush blueberry.

The fruit can be used for a wide variety of value-added products. Through our sister company, Haskapa, we sell juice, jam and dried berries but the berry can also be used for syrups, candies, baked goods, ice cream or anything else you can imagine. The high levels of tannins found in the skins make the berries a natural choice for alcohol based products—on their own or as an addition to grape wines to add that extra dry note.

The price? Current global production of Haskap is only about 800 acres in total. The 2013 market price per pound of Haskap berries was $7 frozen and $11 fresh. That means this market is wide open and ripe for the picking.

For these reasons and more, Haskap plants are an excellent option both for commercial growth and small-time gardeners. I urge you to check out our presentation to learn more about the Haskap and to get a taste of the berry’s fabulous flavour. Growers from our Nova Scotia farm will be on hand to answer any questions you may have.

For more information please contact Elise Boisvert at elise@lahavenaturalfarms.com. Or check out our website at www.lahavenaturalfarms.com!
Governor Cuomo Nominates Richard A. Ball as Commissioner of Agriculture and Markets

January 9, 2014. Governor Andrew M. Cuomo today announced the nomination of Richard A. Ball as Commissioner of the New York State Department of Agriculture and Markets.

“Richard Ball is a lifelong farmer and advocate for sound farm policy who will bring fresh ideas and strong leadership to the Department of Agriculture and Markets,” Governor Cuomo said. “Agriculture is a vital sector of the state’s economy, providing thousands of jobs, food for people around the globe, and a way of life for generations of New Yorkers. Richard embodies the proud tradition of farming here in New York State and will be a superb addition to this Administration.”

A native New Yorker, Mr. Ball has made a living in agriculture his entire life. His inspiration to become a farmer came from his grandparents, who were lifelong dairy farmers. At 18 years old, Mr. Ball began his career in agriculture as a farm worker at a vegetable farm in Rhode Island. He later became operations manager of that same farm. After 20 years in Rhode Island, Mr. Ball moved back to the Empire State with an opportunity to become a farmer owner. For the past 20 years, he has been the owner and operator of Schoharie Valley Farms in Schoharie, NY, which consists of 200 acres and produces a wide range of vegetable crops, small fruits and greenhouse crops. The farm serves both retail and wholesale consumers through an onsite farm market known as “The Carrot Barn” and ships to brokers and restaurants in the local area as well as New York City.

Mr. Ball has held a number of positions within agriculture and community organizations at the local, state and national level, including:

- Vice President - New York State Vegetable Growers Association
- Board of Directors, Member of Executive Committee, Member of Audit Committee, Chairman of Labor Committee – New York Farm Bureau
- Member of Labor Committee (past Chairman) – American Farm Bureau
- Representative for Schoharie County – Mohawk Valley Regional Economic Development Council
- Board of Directors (past President) – Schoharie County Farm Bureau
- President – Schoharie Valley Association
- Chairman – Schoharie Recovery, Inc., a non-profit formed to help the recovery effort from Hurricane Irene and Tropical Storm Lee
- Past President – Schoharie County Chamber of Commerce.

Mr. Ball, his wife Shirley, and his three children are actively engaged in farming with a growing number of future farmers among the grandchildren.

Dean Norton, President of New York Farm Bureau, said, “New York Farm Bureau could not be more pleased with the Governor’s outstanding selection of Richard Ball to be the next Commissioner for the Department of Agriculture and Markets. As a farmer, Richard understands the needs and challenges we all face on our farms. That knowledge and the respect he has among his peers will serve the state’s agricultural community well. We look forward to continuing Farm Bureau’s strong partnership with Richard and Governor Cuomo to support every farmer in New York.”

Kathryn Boor, the Ronald P. Lynch Dean of Cornell University’s College of Agriculture & Life Sciences, said, “On behalf of the faculty and staff at CALS, I extend my congratulations to Richard Ball on this appointment. We look forward to working closely with Mr. Ball on key issues facing New York
State’s farmers and producers. This is an exciting time for agriculture, and I am confident that his experiences and expertise will help New York State continue to lead the way.”

Mark Henry, President of the New York State Vegetable Growers Association, said, “The New York State Vegetable Growers Association is proud and excited to hear about fellow vegetable farmer, Rich Ball’s, nomination as Commissioner of Agriculture and Markets. Rich is first and foremost a farmer. He’s watched his land flood, worked through blizzards, and watched the first green tips push their heads above soil every spring in spite of all the challenges. With the nomination of Rich Ball as Commissioner of Agriculture and Markets, the New York State Vegetable Growers Association feels that 2014 is starting out on a positive note.”

Jim Allen, President of the New York Apple Association, said, “I’ve known Richard Ball for a number of years and have worked with him on many different initiatives, including the Pride of NY program. He has an astute knowledge of all aspects of agriculture. His operation in Schoharie is a destination for thousands every year and I think he is an absolutely wonderful choice as our state’s next Commissioner of Agriculture and Markets.”

GrowNYC Executive Director Marcel Van Ooyen said, “On behalf of GrowNYC, I’d like to congratulate Richard Ball on his well-deserved nomination as Commissioner of Agriculture and Markets. Richard Ball understands the importance of building relationships between upstate agriculture and downstate consumers, and we look forward to working with him to expand opportunities for New York agricultural producers across New York City in the future.”

Jim Trezise, President of the New York Wine and Grape Foundation, said, “Governor Cuomo’s selection of Richard Ball as Commissioner of Agriculture and Markets is a strong choice, and great news for the state’s vibrant wine and grape industry. Mr. Ball understands that pro-growth agricultural policies lead to a robust farm sector. We’ve seen it already with the growth of our farm-based beverage industry and in a number of other industries across the state. I look forward to working with Commissioner Ball on Taste NY and other state initiatives designed to promote New York products.”

Governor Cuomo Announces $12 Million Available to Protect Water Quality and Make New York’s Farms Safer and Cleaner

January 13, 2014, Albany, NY. Governor Andrew M. Cuomo today announced $12 million to aid farms in implementing water quality conservation systems that will help make New York’s farms cleaner and safer. This funding is available to County Soil and Water Conservation Districts through the New York State Environmental Protection Fund. Grants will be administered by the state Department of Agriculture and Markets and the New York State Soil and Water Conservation Committee.

“New York’s agricultural industry has been an economic success story for the past three years and its continued growth depends on keeping our farms safe and clean,” Governor Cuomo said. “This $12 million will help local farmers across New York maintain a clean water supply which is vital to their livelihood. With our support, New York’s farms are going to continue to expand, creating more jobs and making our state’s home grown products popular across the country.”

Agricultural Nonpoint Source Pollution is runoff from agricultural lands that has the potential to enter water bodies. This funding will help farmers work with County Soil and Water Conservation Districts to prevent such pollution from occurring by employing soil erosion prevention methods, planting vegetation along streams to prevent runoff, adopting nutrient management systems, and planting cover crops after the annual harvest to protect the soil.

County Soil and Water Conservation Districts can apply for grants under the Agricultural Nonpoint Source Abatement and Control Program (AgNPS Program) Request for Proposals (RFP). The AgNPS Program is a competitive grant program that awards funding to County Soil and Water Conservation Districts. In turn, these Districts will address water quality challenges facing farms in priority watersheds throughout the State.

Conservation Districts utilize the state’s Agricultural Environmental
Management (AEM) framework to help farmers meet these challenges head on. The AEM framework sets water quality priorities and helps farmers develop specific plans to qualify for implementation through the AgNPS Program. Administered through the County Soil and Water Conservation Districts, AEM helps farms make common sense, cost-effective and science-based decisions to help meet business objectives while protecting and conserving the State’s natural resources. Currently, more than 13,000 farms participate in AEM, which has helped install 5,000 new conservation practices with the assistance of AgNPS Program funds. Since the program’s inception in 1993, New York State has dedicated more than $125 million to the AgNPS Program.

George Proios, Chair of the NYS Soil and Water Conservation Committee, said, “New York’s 58 local Soil & Water Conservation Districts are extremely grateful for the strong support Governor Cuomo has shown us over the past several years: for signing legislation that authorizes increased state funding; by providing increased reimbursement in his state budget to recognize local Districts’ critical work during two major storm events; and for increases each year to the Environmental Protection Fund that provide important resources to local farmers for projects that protect, preserve and enhance our state’s natural resources. In this 20th cycle of funding, the Committee is pleased to be able to once again provide opportunities to partner local Conservation Districts with farmers to promote conservation across New York State.

The Round 20 AgNPS Program RFP for County Soil and Water Conservation Districts is available on the Department of Agriculture and Markets website: http://www.agriculture.ny.gov/RFPS.html. All appropriate materials must be submitted by the deadline of March 31, 2014 for the application to be considered complete.

For additional details about this program and other natural resource protection programs, please contact your local County Soil and Water Conservation District. A complete listing of County Soil and Water Conservation Districts can be found here: http://www.nys-soilandwater.org/contacts/county_offices.html.

Value-Added Producer Grants - Due Feb 24

The primary objective of the VAPG program is to help agricultural producers enter into value-added activities related to the processing and/or marketing of bio-based value-added products.

Generating new products, creating and expanding marketing opportunities, and increasing producer income are the end goals of this program.

You may receive priority if you are a beginning farmer or rancher, a socially-disadvantaged farmer or rancher, a small or medium-sized farm or ranch structured as a family farm, a farmer or rancher cooperative, or are proposing a mid-tier value chain, as defined in the Program Regulation. Maximum Grant Amount: $75,000 for planning grants; $200,000 for working capital grants.

For more information: http://www.rurdev.usda.gov/bcp_vapg.html.

Rutgers University Introduces Agritourism Training Program

Northeast SARE and Rutgers University have convened a multistate team to develop and deliver educational programming to agricultural educators and service providers working with Northeast farmers interested in agritourism development. The training program is multi-tiered, comprising workshops, webinars, and web-based resources focused on minimizing farm safety risks, managing liability, mitigating financial risk through enterprise budgeting, and improving marketing strategies.

For more information and access to the training program: http://agritourism.rutgers.edu/training/
NEW YORK BERRY NEWS  VOL. 12 No. 11  Page 12 of 19

BERRY ORGANIZATION NEWS

NEW YORK BERRY GROWERS ASSOCIATION

Dale-Ila M. Riggs, President, NYS Berry Growers Association

By now, most berry growers who read the NY Berry News know that the NYS Berry Growers Association successfully obtained $285,000 in research funding in 2013 for our battle against Spotted Wing Drosophila (SWD). This funding enabled our Research and Extension team to look at many different ways of dealing with this pest and preliminary work has uncovered new knowledge that growers will be able to use in 2014.

But the battle is far from over. Decreased sensitivity to specific insecticides has already been detected in Michigan. We are talking about fruit flies after all. Their ability to reproduce many generations over a short period of time is almost legendary. So on Monday January 27th, the Board of Directors of the NYS Berry Growers Association will be traveling to Albany once again.

We’re going to showcase the successes of last year from our funding allocation, and we’re going to request funding again for 2014 to continue this fight against SWD that threatens the viability of every blueberry and fall raspberry grower in the state. We’ll be meeting with members of the Senate Ag Committee, the Assembly Ag Committee, our individual representatives, and the Governor’s office.

I invite any member that desires to join us. Come tell your story about how SWD impacts your farm.

If you would like to join us, let Paul Baker or I know. Paul can be reached at pbaker.hort@roadrunner.com. Let him know you would like to join us and tell him who your state senator is and who represents you in the Assembly. He will make appointments for the Board to visit with them.

Perhaps going to Albany isn’t your forte, but you would still like to be involved in helping the berry industry in NYS. Please consider volunteering to serve on the Board of the NYS Berry Growers Association. We welcome people with forward thinking ideas and who recognize the vast potential of the berry industry in NY.

On the Board, we especially welcome people to represent agricultural suppliers, the Saint Lawrence Valley, and Southwestern NY. If you know of anyone, including yourself, that fits that description, feel free to contact any Board member for more information. We are all listed on the web site for the NYS Berry Growers Association.

The Association is looking forward to another productive year assisting the berry industry in NYS! Please join us.
Ontario Berry Growers Association – Ontario Fruit and Vegetable Convention Berry Program

Tuesday, February 18, 2014 – Embassy Suites, Niagara Falls [http://www.ofvc.ca/](http://www.ofvc.ca/)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00 am</td>
<td>What I look for in a Strawberry Variety - Flavorfest and Other New Selections</td>
<td>Kim Lewers, USDA-ARS Beltsville, MD</td>
</tr>
<tr>
<td>9:30 am</td>
<td>Grower Profile – Leisure Farms</td>
<td>Mitch Deschateletes, Sturgeon Falls, ON</td>
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<tr>
<td>10:15 am</td>
<td>Strawberry Virus Update</td>
<td>John Lewis, Perennia Kentville, NS</td>
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<tr>
<td>10:45 am</td>
<td>BREAK</td>
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<tr>
<td>11:15 am</td>
<td>The Local Food Fund and other Foodland Ontario Initiatives</td>
<td>Denise Zaborowski, Foodland Ontario</td>
</tr>
<tr>
<td>11:45 am</td>
<td>Hitting the Target – Sprayer Technology for Berries</td>
<td>Jason Deveau, OMAF and MRA, Simcoe</td>
</tr>
<tr>
<td>12:00 am</td>
<td>National Strawberry and Raspberry Council Update</td>
<td>Kevin Schooley, OBGA</td>
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<tr>
<td>12:15 am</td>
<td>OBGA Annual Meeting &amp; Lunch 12:15 - 2:00 p.m.</td>
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<tr>
<th>Time</th>
<th>Track</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>2:00 pm</td>
<td>Pest Management Track</td>
<td>Spotted Wing Drosophila in Berry Crops: Pam Fisher, OMAF and MRA</td>
</tr>
<tr>
<td>2:45 pm</td>
<td>Monitoring Pesticides and Microbes on Berries – What happens if they are found</td>
<td>Paul Bailey, OMAF and MRA, Vineland</td>
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<tr>
<td>3:00 pm</td>
<td>Round Table Discussions</td>
<td>Join 3 of the 5 discussions</td>
</tr>
<tr>
<td>3:30 pm</td>
<td>1. Problem Pests- Spotted Wing Drosophila, Virus, Anthracnose</td>
<td>Pam Fisher, Frank Louws</td>
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<tr>
<td>4. Local Food Fund</td>
<td>Denise Zaborowski, Foodland Ontario</td>
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<tr>
<td>5. Minimizing Bee Toxicity</td>
<td>Paul Kozak, OMAF and MRA</td>
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<tr>
<td>5:00 pm</td>
<td>Adjourn</td>
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<tr>
<td>7:30 pm</td>
<td>OBGA social time and refreshments</td>
<td>Room 4103</td>
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</table>
**Ontario Berry Growers Association – Ontario Fruit and Vegetable Convention Berry Program**

*Wednesday, February 19, 2014 – Scotiabank Convention Center, Niagara Falls*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:30 am</td>
<td>Biennial Raspberry Production – What we have learned over the past 15 years</td>
<td>Kevin Schooley, Ontario Berry Growers Association</td>
</tr>
<tr>
<td>10:00 am</td>
<td>Micronutrients –What is best for berries</td>
<td>Joe Uyenaka, NutriAg Kirk Patterson Scotland Agromart</td>
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<tr>
<td>10:30 am</td>
<td>Integrated Disease Management and Dealing With Fungicide Resistance in Strawberry and Raspberry</td>
<td>Frank Louws, North Carolina State University, Raleigh, NC</td>
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<tr>
<td>11:00 am</td>
<td>The Impacts of Fumigation and Alternatives on Nematodes and Soil Ecology</td>
<td>Tom Forge, AAFC, Summerland, BC</td>
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<tr>
<td>11:30 am</td>
<td>Global Trends in Berry Production</td>
<td>Adam Dale, University of Guelph</td>
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<tr>
<td>12:15 - 2:00</td>
<td>Lunch &amp; Trade Show</td>
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<tr>
<td>2:00 pm</td>
<td>Vector control – the key to virus management</td>
<td>John Lewis, Perennia, Kentville, NS</td>
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<tr>
<td>2:30 pm</td>
<td>Low Tunnel Strawberry Production</td>
<td>Kim Lewers, USDA-ARS Beltsville, MD</td>
</tr>
<tr>
<td>3:00 pm</td>
<td>Software to Track Your Product and Labour Efficiency and Quality</td>
<td>Rudy Heeman, Heeman Strawberries, Thorndale</td>
</tr>
<tr>
<td>3:30 pm</td>
<td>Protected Culture and Season Extension for Strawberries and Raspberries</td>
<td>Becky Hughes, University of Guelph, New Liskeard</td>
</tr>
<tr>
<td>4:00 pm</td>
<td>Row Cover Management Grower Panel:</td>
<td></td>
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New Food Safety Guide Helps Fresh Produce Operations Safeguard against Listeria

January 6, 2014. WASHINGTON, D.C. - The United Fresh Food Safety & Technology Council has developed a document, Guidance on Environmental Monitoring and Control of Listeria for the Fresh Produce Industry, that helps guide the fresh produce industry in developing practical and scientifically sound "search and destroy" programs for Listeria. The guide is free and available online for United members and non-members.

Two recent outbreaks have demonstrated the vulnerability of some fresh and fresh-cut operations to Listeria harborage leading to product contamination. Some customers and supplier operations have implemented Listeria testing programs without a good understanding of their scientific validity. While the processed foods industry and FDA have long had guidance for Listeria monitoring and control, guidance applicable to the unique conditions of fresh produce handling operations has been lacking. This guide describes in-depth handling techniques for fresh and fresh-cut produce, which offers some unique opportunities and challenges.

The guide is applicable to all fresh and fresh-cut produce operations, including field and field packing, packinghouse and other produce handling operations such as re-pack, value-added and transport/distribution to retail/foodservice. All produce handling operations are encouraged to use this guide to 1) determine their level of vulnerability to Listeria harborage that may lead to produce contamination, and 2) if vulnerable, to develop and implement an effective Listeria monitoring and control program.

To download a free copy of the Guidance on Environmental Monitoring and Control of Listeria for the Fresh Produce Industry, visit http://www.unitedfresh.org/listeria_guide.

Key Provisions of the Proposed FSMA Rules Affecting Farmers

Statement from FDA Deputy Commissioner for Foods and Veterinary Medicine, Michael Taylor

December 19, 2013. FDA appreciates and takes very seriously the extensive input we have received from produce farmers and others in the agricultural sector on the proposed FDA Food Safety Modernization Act (FSMA) rules on produce safety and preventive controls for human food, which we published in January 2013. We have made every effort to solicit input on the proposed rules, not only through the standard rulemaking process, but also by participating in more than 150 meetings and by travelling to numerous farms of varying types and sizes from Maine to California. To ensure broad input and facilitate constructive dialogue with the produce community, FDA has extended the comment periods on the proposed rules three times.

Based on our discussions with farmers, the research community and other input we have received, we have learned a great deal, and our thinking has evolved. Everyone shares the goal of ensuring produce safety, but, as we said at the beginning of the process, the new safety standards must be flexible enough to accommodate reasonably the great diversity of the produce sector, and they must be practical to implement.

To achieve this goal, we believe that significant changes will be needed in key provisions of the two proposed rules affecting small and large farmers. These provisions include water quality standards and testing, standards for using raw manure and compost, certain provisions affecting mixed-use facilities, and procedures for withdrawing the qualified exemption for certain farms. We have heard the concern that these
FOCUS ON FOOD SAFETY (continued)

provisions, as proposed, would not fully achieve our goal of implementing the law in a way that improves public health protections while minimizing undue burden on farmers and other food producers.

Because the changes to the key provisions would be significant, FDA plans to propose revised rule language and seek comment on it, allowing the public the opportunity to provide input on our new thinking. There may be other revisions to the proposed rules; the scope of the revised proposals, on which we will seek further comment, will be determined after we complete our initial review of written comments. We believe that this additional step to seek further input on revised sections of the proposed rules that need significant adjustment is critical to fulfilling our continuing commitment to getting these rules right.

Our plan is to publish revised proposed rule language by early summer 2014. We will accept additional comments only on those sections of the proposed rules that have been revised. FDA remains under a court order regarding the timelines for finalizing these rules. FDA recognizes that completing these rules is essential to protecting the public health and is committed to completing them as quickly as possible.

It is gratifying to FDA that in our meetings around the country, we have received broad support for moving forward in implementing FSMA in a timely manner in light of its important food safety and public confidence goals. Thanks to all of you who have worked with us. We will continue this collaborative approach as we move down the pathway to final rules and to full implementation of the FDA Food Safety Modernization Act in the years to come.

See also, Your Input is Bringing Change to Food Safety Rules, a blog by Michael Taylor.

ON THE ORGANIC SIDE...

USDA Blog: A One-Stop Shop for Organics, with Lots in Store - Mark Lipson, USDA Organic Policy Advisor

Looking for USDA programs and services that support the growing organic sector? USDA has created a centralized web resource center at USDA.gov for all the programs, services, and data we have that support organic agriculture.

Visit (and bookmark) the organic web resource center to access:

- Conservation programs, flexible microloans, and other financial resources for farmers and ranchers.
- Organic price reports, cost/revenue comparisons, and other economic and market data.
- Improved crop and livestock insurance and other programs tailored to the organic sector.
- Production and conservation assistance and research on organic agriculture.
- Benefits of organic certification and how to get certified.
- USDA staff at your local field offices and much more!

USDA is committed to helping organic agriculture grow and thrive by removing obstacles for organic farmers and businesses.

Earlier this year, Secretary Vilsack instructed all USDA agencies to incorporate the needs of the organic sector into their programs and services, and asked AMS to lead this effort.

This one-stop shop for organic-related programs and services at USDA.gov is one way we are meeting those needs.
$ MONEY TALK $  

NYS Unemployment Insurance (UI)  
Changes in 2014 (from NYS45i) - Alison De Marree, Lake Ontario Fruit Team

Of the total amount of remuneration paid to each employee by each employer during the calendar year, the UI wage base is the portion of that total which is subject to contributions. The UI wage base will adjust January 1 of each year, as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>UI wage base</th>
<th>Year</th>
<th>UI wage base</th>
</tr>
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<tbody>
<tr>
<td>2013 and prior</td>
<td>$8,500</td>
<td>2020</td>
<td>$11,600</td>
</tr>
<tr>
<td>2014</td>
<td>10,300</td>
<td>2021</td>
<td>11,800</td>
</tr>
<tr>
<td>2015</td>
<td>10,500</td>
<td>2022</td>
<td>12,000</td>
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<tr>
<td>2016</td>
<td>10,700</td>
<td>2023</td>
<td>12,300</td>
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<tr>
<td>2017</td>
<td>10,900</td>
<td>2024</td>
<td>12,500</td>
</tr>
<tr>
<td>2018</td>
<td>11,100</td>
<td>2025</td>
<td>12,800</td>
</tr>
<tr>
<td>2019</td>
<td>11,400</td>
<td>2026</td>
<td>13,000</td>
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After 2026, the wage base will permanently adjust on January 1 of each year to 16% of the state average annual wage, rounded up to the nearest $100. The state average annual wage is established no later than May 31 of each year. The annual average wage cannot be reduced from the prior year’s level.

Obtaining forms: Download the December 2013 Form. The Tax Department does not mail preprinted withholding tax forms to taxpayers. Current withholding tax forms are available for download on the Tax Department Web site (at www.tax.ny.gov).

ONLINE REPORTING & PAYMENT
You may also make payments online after setting up an account. Benefits of Web Filing include:
- direct payment from your bank account
- instant confirmation

Completing Form NYS-45
This return and related forms are designed to be read by information processing equipment. To assist, please be sure to send us original forms (not photocopies). When entering information, please print with a black pen or type in the number(s) 0-9 or letter(s) A-Z. Do not enter dollar signs, commas, decimal points, or any other punctuation or symbols (minus signs, parentheses, etc.).

Mail your return to: NYS Employment Contributions and Taxes, PO Box 4119, Binghamton NY 13902-4119
If you are not using U.S. Mail, be sure to consult Publication 55, Designated Private Delivery Services.

(REprinted from: Fruit Notes, Lake Ontario Fruit Program, Vol. 14 No. 1, January 3, 2014)

REMINDER: NYS Withholding Tax Filing Requirements - Alison De Marree, Lake Ontario Fruit Team

Employers paying wages or other payments subject to income tax withholding must file a return and pay the New York State, New York City, and Yonkers taxes required to be withheld.

NYS-45
All employers required to withhold tax from wages must file Form NYS-45, Quarterly Combined Withholding, Wage Reporting, and Unemployment Insurance Return, each calendar quarter.

•If you withhold less than $700 during a calendar quarter, remit taxes withheld with your quarterly return, Form NYS-45. See “NYS-1” if you withhold more than $700 during the calendar quarter for additional filing requirements.

•Generally, employers must file quarterly, even if they did not pay wages during the quarter and have zero withholding. See Instructions for Form NYS-45 for exceptions.

NYS-1
If you withhold $700 or more during a calendar quarter you must remit the tax with Form NYS-1, Return of Tax Withheld, within 3 or 5 business days after the payroll that caused the accumulated tax withheld to equal or exceed $700.

•If you have more than one payroll within a week (Sunday through Saturday), you are not required to file the NYS-1 until after the last payroll in the week.

•When a calendar quarter ends between payrolls paid within a week, any accumulated tax required to be withheld of at least $700 must be remitted with Form NYS-1 after the last payroll in the quarter.

•If you have filed at least once during the calendar quarter (using Form NYS-1) and have an unremitted balance of tax withheld that is less than $700 after the last payroll of the quarter, remit this amount with your quarterly return, Form NYS-45, instead of form NYS-1.

•Make check payable to NYS Income Tax and mail to: NYS Tax Department, Processing Unit, PO Box 4111, Binghamton, NY 13902-4111.
$ MONEY TALK $ (continued)

Reporting annual wage and withholding totals

- You are required to report **annual wage** and **withholding totals** for every employee you employed during the year on the last NYS-45 filed for the calendar year.

- Employers do not submit a copy of federal Form(s) W-2 to New York State.

(Reprinted from: Fruit Notes, Lake Ontario Fruit Program, Vol. 14 No. 1, January 3, 2014)

2014 Custom Machine Work Rate Summary Update Available - Dennis Stein, Michigan State University Extension

Cost of farm machine work rates adjusted to cover current costs update is available in the 2014 Farm Machine Work Rate summary.

**December 17, 2013.** Exchanging farm machine work between farms has and will continue be a useful management tool. The “2014 Farm Machine Work Rate” updated summary report has been posted on the [Michigan State University Extension Farm Information Research Management (FIRM) webpage](http://www.msu.edu). This type of information can be useful for farms that exchange equipment to find a starting point for establishing a reasonable value for the machine work being provided. A farm’s actual machine cost of operation would require you to develop a more detailed analysis of your equipment and situation. A simple worksheet for this task is also part of this year’s report and farms are encouraged to do their own cost calculations. Information contained in this report is based on several custom work survey reports that have been compiled into this summary.

For farms looking back to 2012 and 2013, you can still find copies of the [Farm Machine Work Rate for 2012 and 2013](http://www.msu.edu). Many farms use this type of information in developing their farm business plan and enterprise cost estimates for 2014. When farm crops or tillage programs change, the cost of operations can also change the economics of the total farming system. Therefore, having a reference number may be helpful in doing a paper evaluation before implementation is undertaken.

(Reprinted from [Michigan State University Extension](http://www.msu.edu))

New Farmers: Explore the Feasibility of Your Farming Ideas in an Online Course Starting Jan 16

"Will it be profitable?" is almost always in the top 3 questions asked by new farmers. While there is no easy answer to this question, the online course **BF 102: Markets and Profits - Exploring the Feasibility of Your Farming Ideas** will help you begin to build a picture of financial feasibility, including market options and enterprise budgets for your ideas. This intro-level course is for you if you’re in the planning or exploring stage of starting a farm, or are in your first year of operation.

"Marketing might be the hardest and most important skill in beginning a farm, and so learning about some of the different ways to go about this was invaluable to me as I start my own farm." - previous BF 102 student

If you complete the course you will:

- Identify farm goals and timelines for an enterprise
- Begin to develop enterprise budgets and understand the potential for profitability with selected agricultural products
- Explore marketing outlets and concepts important for successfully branding and selling your product
- Understand that everything in farming is interconnected

The course runs Thurs. Jan. 16 - Feb 20, with webinars once weekly on Thurs. evenings from 7-8:30pm EST. The cost is $200, and multiple people from the same farm may participate without paying extra.


**BF 102: Markets and Profits - Exploring the Feasibility of Your Farming Ideas** is part of the line-up of 12 online courses offered this Fall, Winter and Spring by the Cornell Small Farms Program. To learn more about each course, please visit [http://nebeginningfarmers.org/online-courses](http://nebeginningfarmers.org/online-courses).
FOCUS ON PEST MANAGEMENT

2013 SWD Economic Impact Survey – Your Input Requested

A survey to collect information measuring the impact of spotted wing drosophila (SWD) on agricultural production in the eastern United States requests your input.


The purpose of this survey is to collect information measuring the impact of spotted wing drosophila (SWD) on agricultural production in the eastern United States. The information collected will be used to prioritize research, extension, and education activities for SWD.

Participation in this survey is voluntary. This survey does not ask you for personally identifying information. Survey data may be summarized by state, crop, farm size, or farm type, but individual survey responses will not be presented. We anticipate that the results of this survey will be available in mid-March 2014, and summarized results will be shared at swd.ces.ncsu.edu.

If you have questions about this survey or would like to be notified when the results are available, please contact Hannah Burrack (hiburrac@ncsu.edu) or 919.513.4344.

Debby Wechsler, NARBA Executive Secretary

Airblast 101: A New Online Resource Available for Users of Airblast Sprayers - Diane Brown, Michigan State University Extension

The Airblast 101 website hosts practical pesticide application technology resources for advanced readers and trainers, including current factsheets, presentations, videos and articles.

January 8, 2014. Thanks to the efforts of Jason Deveau, application technology specialist at the Ontario Ministry of Agriculture and Food (OMAF), and others, there is a new online resource available with practical tools for users of airblast sprayers: Airblast 101. Operators of airblast sprayers apply pesticides to ensure the health and marketability of their crops. For an application to be successful, it is necessary to understand safe pesticide handling, which products to apply, correct application timing and to have the requisite skill to apply pesticides effectively and efficiently.

Until recently, operators had limited resources to address application skills. Airblast 101, now available online and recommended by Michigan State University Extension, is a classroom-style course designed to provide practical information for applying pesticides, plant growth regulators and foliar nutrients effectively, economically and in an environmentally responsible manner. Developed by OMAF in association with Croplife Canada, this course was created to introduce a new operator to spraying or to provide a review for a seasoned veteran.

Chapters include airblast sprayer efficiency; calibration; confirming coverage; nozzle choices; troubleshooting coverage; tank-mixes; controlling spray drift and sprayer maintenance and cleaning. Although metric units are used, there are pages with conversions to
FOCUS ON PEST MANAGEMENT (continued)

U.S. units and a wealth of other information worth a look for anyone using airblast sprayers.

The introduction of Airblast 101 in 2011 has provided hundreds of operators with a solid grounding in the basics of airblast sprayer operation as well advanced techniques. Those that have made changes to their spray programs report significant improvement in the effectiveness of the application, such as improved crop quality or yield, and greater application efficiency, such as pesticide inputs reduced by about 10 percent or more per annum and reduced environmental impact such as drift and runoff.

The Airblast 101 website hosts the entire content of the handbook along with a library of additional resources including factsheets, a series of sprayer-related PowerPoint presentations, instructional videos and articles submitted by Extension and university staff across North America. The website serves as a one-stop shop for airblast sprayer information and provides information about where Airblast 101 courses are being taught. The site is free to anyone interested in improving their spray programs. For more information, contact jason.deveau@ontario.ca. (Reprinted from: Michigan State University Extension.)

Disease Snapshot: Strawberry Leaf Scorch – Kerik Cox, Cornell University

Cause: *Diplocarpon earlianum*

When to watch for it: Year round

First line of defense: Planting resistant cultivars or frequent renewal of susceptible cultivars

Summary: Losses from *D. earlianum* can range from light to severe depending on the cultivar chosen, cropping system type, and prevailing weather conditions that season. Symptoms of the disease are most discernible on leaves, and manifest as irregular purple blotches that lack white or gray centers. The color of the lesion center is a feature that separate foliar symptoms from *Mycosphaerella* leaf spot. As the disease progresses infected leaves will dry out, curl at the margins, and appear burnt. *D. earlianum* can also infect the leaf petioles, sepals, petals stamens, pistils, and fruit. Infections can occur year round, and can continue to develop under snow cover. Severe damage from *D. earlianum* may weaken the plant to the degree that it cannot overwinter. Plants that survive to the next season will have reduced vigor and yield. Resistant cultivars are available, but susceptible cultivars are often favored because of horticultural characteristics. Renewing plantings of susceptible cultivars has shown to prevent severe *D. earlianum* damage because severe damage is only seen on the second and third year of planting. Irrigation systems should be set up to ensure leaves do not remain wet for significant lengths of time because this decreases the incidence of *D. earlianum* infection within the planting. Chemical control is may be necessary on susceptible cultivars, and applications of copper or copper tank mixed with thiophanate-methyl fungicide products have shown to provide effective control when conditions are conducive for infection. Below, A: foliar, fruit, and petiole lesions reduce not only plant vigor but also the value of the crop. B: Foliar lesions lack white to gray centers, which distinguishes them from foliar lesions caused by *Mycosphaerella* leaf spot.
NEW YORK BERRY NEWS

NYBN is a monthly commercial berry production newsletter provided by Cornell berry team members. It is designed to help promote and strengthen commercial berry crop production in New York State. NYBN is available free of charge in pdf format at: http://www.fruit.cornell.edu/nybn.

Visit the NYBN web site to view back issues or to subscribe to monthly e-mail notices with table of contents and a link to the most current issue.

More on individual team members and their areas of expertise may be found at: http://www.fruit.cornell.edu/berry/berryteam.htm.

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

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Upcoming Events


BFBS Regional Workshops “Using the Berry Farm Business Summary Results to Improve your Bottom Line
January 31, 2014 - BFBS Workshop, Ballston Spa, NY. To Register: Marcie Vohnoutka, CCE ENYCHP, 518-272-4210; mmp74@cornell.edu; register on-line at http://cdvsfp.cce.cornell.edu/.

February 6, 2013 - BFBS Workshop, Elmira, NY 14904. Stephanie Mehlenbacher 607-664-2300 or sms64@cornell.edu

February 10, 2014 - BFBS Workshop, Brant, New York. Virginia Carlberg (716) 664-9502 x 202 vec22@cornell.edu or Megan Burley (716) 652-5400 ext.138 msb347@cornell.edu


February 27 & 28, 2014 Farm Food Safety Training with GAPS. Bath, NY, 8:30am–3pm both days. More information: Craig Kahlke, cjk37@cornell.edu, 585-735-5448.


June 18-25, 2015 – 11th International Rubus & Ribes Symposium, in Asheville, NC, June 21-25, with preconference tour to farms and research sites June 18-20. More info to come. If you are interested in being a sponsor of this event, contact gina_fernandez@ncsu.edu.