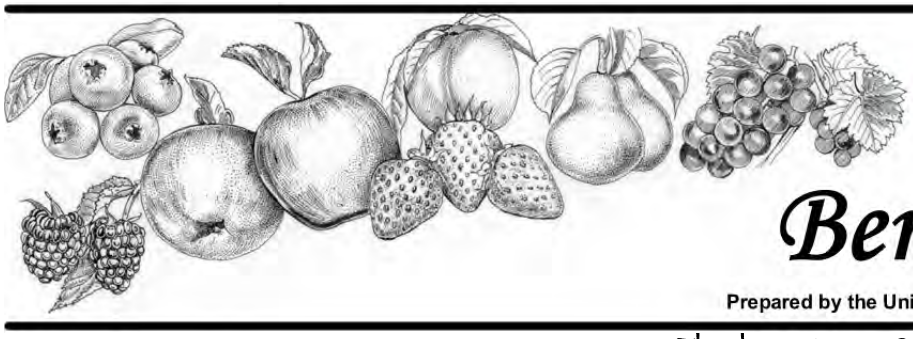

UMass Extension
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Berry Notes

Prepared by the University of Massachusetts Fruit Team

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SHORTS

December to be the last issue of Massachusetts Berry Notes -

Announcing *UMass Berry Notes* transition to combine with *UMass Healthy Fruit*: Beginning in 2019 the monthly *Berry Notes* newsletter will merge with the sister publication *Healthy Fruit*. This change will allow for more frequent and locally focused information delivery. Berry information will appear in *Healthy Fruit* each week during the growing season and will focus on brief timely topics and pest alerts that link the reader to more in-depth information online. There will continue to be periodic releases of information during the 'off-season' with meeting notices and other relevant topics. *IPM Berry Blasts* will continue in parallel with *Healthy Fruit* for 2019 and then be fully merged with that publication as a comprehensive fruit e-newsletter from the UMass Extension Fruit Program.

There are still spots available in the Fall *Exploring the Small Farm Dream* course offered by MDAR - Tuesdays 6pm-9pm, November 13th to December 11th, in Sudbury MA at the Sudbury Grange. This 5-week course, developed by The New England Small Farm Institute, is designed to guide aspiring farmers through the decision-making process of starting a farm business in Massachusetts. Participants will assess their skills and knowledge related to starting a farm and running a business, clarify their farming vision, and analyze the feasibility of their idea. It includes 4 classes and a farmer panel to help answer questions that participants have about the realities of farming. Cost is $100 per enterprise. *Applications will be accepted on a First Come First Serve basis until the course is filled.* A western MA course is being planned for late winter. For an application and more info please see **www.mass.gov/service-details/agricultural-business-training-program-abtp**. Email applications to: Deanna Levanti at **BeginningFarmerCoordinator@gmail.com**

Grant Announcement: Stewardship Assistance and Restoration on APRs (SARA) - The Department invites responses from Massachusetts farmers who own or operate farm land under the Agricultural Preservation Restriction ("APR") Program who wish to participate in Round 7 of the Stewardship Assistance and Restoration on APRs Program ("Program"). The purpose of the Program is to address stewardship or restoration issues on farmland resources in order to maximize productive agricultural use of the protected resource.

Funding of up to $25,000, with a 15% match, may be available for identified improvements that will help restore or enhance the protected land resources on an APR farm property.

Eligible uses of funds include contracted labor or equipment rental costs to clear land or reclaim inactive fields back to active cropland use such as: clearing vegetation, removing rocks or stumps, cutting back grown in field edges, or reseeding or applying soil or crop amendments to inactive cropland or pastureland to bring it back into production. Funding may be also be used to restore farm resources that have been negatively impacted by flooding, erosion, storms, tornadoes and other natural disasters.

The deadline for applications is December 7, 2018 by 4 PM, and all projects must be completed by June 30, 2019. Find the application here: **www.mass.gov/media/1733661/download**

STRAWBERRY

Winter Mulch for Strawberries

Sonia Schloemann, UMass Extension

An important fall job in commercial strawberry production is mulching. Strawberries are commonly grown in cold climates, such as the northern US and Canada, but the strawberry plant itself is actually quite vulnerable to cold injury. Research has shown that, without mulch, strawberry crowns can suffer damage at temperatures below 12°F and unprotected strawberry plants can suffer desiccation damage from drying winter winds. A protective mulch can protect strawberries from cold by providing insulation, and from desiccation by providing a barrier against drying winds. Mulches will also protect plants from injury caused by soil heaving, which results from freezing/ thawing cycles during the winter. So, a key to consistent quality strawberry production in cold climates is in protecting the plants from severe temperatures or temperature swings through the practice of mulching.

Production systems can also affect the need for mulching. Plants on raised beds, for example, are more vulnerable to cold and desiccation injury than plants in level plantings, especially in locations that are exposed to strong winter winds. Annual production systems, such as fall planted plasticulture, may utilize less hardy or disease susceptible cultivars. As we will see, mulching practices must adapt to these new systems.

When should the strawberry grower plan to apply mulch? Research suggests that a good timing guide is to apply mulch after three consecutive days with a soil temperature of 40°F or below. This soil temperature usually occurs after multiple frosts, and when the plants have slowed growth in response to cooler temperatures. It is best to apply mulch before the soil freezes solid. In New England mulches are applied in late November.

What is a good mulch material? The traditional mulching material for strawberries in New England is straw. Straws from wheat, rice, oats, or Sudan grass work well. Straws coarser than Sudan grass are not recommended. Straw should be clean, free from weed seed, and contains a minimum of grain seed. Strawberry growers can produce their own straw, often cutting the straw before the grain seed is viable. Store straw for mulching in a dry area. Occasionally, grain seedlings can become a weed problem the following spring; an application of sethoxydim will give good control.

How much mulch should be applied? A traditional, level matted row planting will require 2.5 to 3 tons of straw per acre for a 2 to 3 inch deep mulch, or about 300 small bales of average weight. Raised bed plantings and sites with strong wind may require twice this amount for adequate coverage.

How is the mulch applied? Smaller plantings may be mulched by hand by shaking out the bales of straw over the row. Larger plantings often use bale choppers to break up the straw bales and distribute the straw over the bed. Choppers are available for both small bales and large round bales.

How and when is the much removed? In the spring, when plants begin to show growth under the winter mulch (new green tissue), the mulch should be raked off the rows to allow sunlight to penetrate and reach the foliage. Delaying removal will delay plant growth and flowering and may reduce yield. Mulch can be raked off by hand with ordinary yard rakes in smaller plantings. In larger plantings, various mechanical tools are available ranging from modified hay rakes and tedders to equipment specifically designed for the purpose.

Floating row covers as mulch. These covers are composed of a plastic such as polypropylene, spun- bonded into a fabric that is permeable to light, air, and water. Research and growers' experiences demonstrate that these covers are useful for winter protection of strawberry plantings. While floating row covers are available in several weights, only the heavier weights are recommended for winter protection. At present a widely available weight recommended for winter strawberry protection is 1.25 oz/yd^2 (42 g/m^2). A variety of fabric widths are available, with common widths ranging from 15 feet to 60 feet. This material currently costs about 4 cents per square foot. With proper care, this heavier fabric should last 3-4seasons. Floating row covers are widely used to protect annual plasticulture plantings.

Row covers are best applied on still days. Be sure to line up sufficient labor to place the row cover. If possible, use wider widths for more efficient application. The row cover edges must be anchored, as must areas where two covers overlap. A variety of methods are used to anchor the edges. Edges may be anchored with posts, rocks, or tube sand. The edges may also be covered with soil.

Once the mulch is in place, the job is not done for the winter. Monitor the planting frequently. If straw has blown off areas, replace at once. Watch the edges of row covers, and adjust anchors if needed. Repair any rips or holes as soon as possible.

Any reference to equipment or product brand names does not constitute endorsement over like products or equipment

RASPBERRIES/BLACKBERRIES

Fall Treatment For Phytophthora Root Rot Of Raspberry

Patty McManus, University of Wisconsin

Many parts of the state received significant rainfall during June and July, leading to Phytophthora root rot on red raspberry, especially in heavier soils and in low-lying areas of fields that were slow to dry. The above ground symptoms of root rot include sparse growth and leaf yellowing, followed by browning and collapse of canes. These symptoms can resemble symptoms of winter injury and cane borer, however, so it's important to closely examine plants as soon as symptoms are seen. Various species of Phytophthora damage roots and crowns, causing entire canes to collapse. The tissue just under the bark of main roots and crowns is orange/red rather than white/green (Fig. 1). By contrast, the raspberry borer chews distinctive rings that girdle canes, and only leaves above the rings wilt (Fig. 2). Winter injury is usually relatively even across a field, or concentrated in areas not protected by snow during cold spells, while Phytophthora root rot is patchy and concentrated in areas where water pools during the growing season.

Figure 1: Species of the water mold Phytophthora cause crown and root tissues just below bark to turn orange to red. Photo from Ontario Ministry of Agriculture, Food and Rural Affairs.

The best time to get a positive diagnosis of root rot is spring, when the various pathogenic species of Phytophthora are infecting plants and secondary opportunistic fungi have not yet invaded. But, the pathogen is also active in fall, if soils are wet. Thus far, many parts of the state have had a dry late summer/early fall. However, if we get enough rain to saturate soils and temperatures remain above freezing, you might consider fungicides to minimize additional infections.

Figure 2: Distinctive rings on raspberry cane caused by cane borer. Leaves above the rings wilt and die.

There are two main groups of fungicides used to control Phytophthora root and crown rot of woody plants. Neither fungicide type will bring back dying roots and wilting canes, but they can protect new roots and keep crowns healthy enough to put out new canes in future years. Fungicides will not help in low-lying areas with heavy soil that gets flooded every year. In those cases, drainage should be rectified by installing drainage tile and/or soil amendments.

Ridomil Gold (SL and GR formulations) contains mefanoxam as the active ingredient. Mefanoxam applied to soil probably kills some Phytopthora on contact, but it also get taken up by roots and prevents new infections. The SL formulation is a soluable concentrate liquid, and the label describes application to soil at the time of planting and in established plantings. In established plantings, the label recommends a spring application (before plants leaf out) and one more application "to coincide with the period most favorable for root rot development." Thus, two applications per season are permitted, and because Phytophthora is favored by cool, wet conditions, one spring and one fall application is the usual pattern. The GR formulation is granular, and similar to SL, spring and fall applications are recommended. With both SL and GR forms, the fall application should be after harvest.

Phosphorous acid (PA) fungicides are sold under several different brand names, (e.g., Aliette, Phostrol, ProPhyt, Rampart) so check labels to be sure that use on raspberries is permitted. PA fungicides are not applied to soil. Label instructions vary, but generally, they are applied as a foliar spray in the spring when raspberry plants show about 1-3 inches of new growth, and again in 3-4 weeks. The fungicide gets taken up by leaves and transported downward to crowns and roots. Two additional applications are permitted, but these would be justified only if conditions are cool and wet, AND there are still green, metabolically active leaves that are capable of taking up fungicide. In cases where leaves are turning color or dropping after harvest, Ridomil applied to soil according to the label would be a better choice. (***Source**: Wisconsin Fruit News, Volume 2, Issue 13, October 6, 2017*)

BLUEBERRIES

Phomopsis Twig Blight of Blueberry

Daniel J. Anco and Michael Ellis, The Ohio State University

Phomopsis twig blight may be the most common canker disease of blueberries. This disease has the potential to severely decrease yields, particularly on susceptible varieties. Losses result from premature ripening of the fruit, decreased productivity due to death of stems or entire plants, and rotted fruit.

Figure 1. *(left) Necrotic tissue spreading from an infected bud through a twig. Courtesy of P. Wharton, University of Idaho, used with permission.*

Figure 2. (right) *A blighted twig caused by Phomopsis vaccinii. Courtesy of W. Cline, North Carolina State University, used with permission.*

Symptoms

Shortly after green tip, symptoms become visible. Infected buds become brown and die. A necrotic, brown lesion forms on the twig around the blighted bud, and the sunken necrotic area spreads as the disease progresses (figure 1). On stems, Phomopsis twig blight symptoms may be confused with symptoms of *Fusicoccum* canker (figure 2). Wounds that are infected can result in girdling cankers that kill the entire twig. Later in the growing season, leaf spots may develop (figure 3). Stems that are infected may wilt during summer, causing their leaves to change color (red or brown) prematurely (figure 4). A fruit rot can also develop at harvest. Infected fruit become very soft and split easily.

Figure 3. Leaf spot symptoms caused by *Phomopsis vaccinii*. *Courtesy of A. Schilder, Michigan State University, used with permission.*

Figure 4. Flagging (rapid drying) of an infected twig with prematurely reddish to brown colored leaves. *Courtesy of A. Schilder, Michigan State University, used with permission.*

Causal Organism and Disease Cycle

Phomopsis twig blight is caused by the fungus *Phomopsis vaccinii*. The fungus survives the winter in dead or infected twigs. From bud break to bloom, fungal spores ooze from small black structures (pycnidia) on previously infected twigs and are spread by rain or overhead irrigation. These spores infect flower buds, and the fungus spreads into and through the twig to other flower and leaf buds. The fungus does not, however, grow into and infect older wood.

Control

Prune and destroy infected twigs during the dormant season. This removes sources of inoculum and limits availability of wounds as points of infection during the growing season. If pruning is done during the growing season, avoid unnecessary wounding.

Avoid overhead irrigation in order to limit spread of the pathogen.

The use of resistant cultivars can help control Phomopsis twig blight, and several resistant cultivars are available, including Bluetta and Elliott. Rubel is moderately resistant. For a list of cultivars commonly grown in the Midwest with resistance to this disease or others, consult Bulletin 861, *Midwest Small Fruit Pest Management Handbook*.

A delayed dormant application of lime sulfur or sulforix after leaf buds begin to break can be effective in reducing early season inoculum and is an important spray if the disease is established in the planting. For the most current spray recommendations, commercial growers are referred to Bulletin 506-B2, *Midwest Commercial Small Fruit and Grape Spray Guide,* and backyard growers are referred to Bulletin 780, *Controlling Diseases and Insects in Home Fruit Plantings.* These publications can be obtained from your local OSU Extension office or OSU Extension's online bookstore at estore.osu-extension.org.

Harvest fruit often enough, at least every 7 days, to prevent overripe fruit from remaining on the bush. This reduces loss from the fruit rot stage.

(***Source**: Ohioline Bulletin HYG-3214*)

GRAPE

Post-Harvest Management In The Vineyard

Amaya Atucha, Univ. of Wisconsin Extension

Harvest time is always a very exciting and hectic time of the year, and after harvest is completed most of us would like to take a break and forget about the vineyard until pruning time. However, post-harvest period is extremely important as it sets the foundation for next year's harvest. Here is a list of things to consider during this fall:

1) **Weed control**. During fall when vine are going dormant is a great opportunity to apply pre-emergence herbicides that will prevent the germination of weed seedling during spring. Pre-emergence herbicides provide little to no effect on germinated weeds, but will prevent the germination of weed seeds that are in the soil. Pre-emergence herbicides need to be incorporated into the soil by rainfall, or irrigation, and in general they pose no threat to the vines, unless the herbicide is leached into the vine's root zone by excessive precipitation. Here's a list of links related to fall weed control:

Now is a Good Time to Assess Your Vineyard Weed Control Program-PennState
Integrated weed Management UC Davis
Grape Weed Control-Northern Grape Project
Midwest Fruit Pest Management Guide 2017

2) **Post-harvest disease control** is extremely important to ensure adequate reserves for the vines to survive winter. After the fruit has been harvested, all carbohydrates produce by the leaves will be store as reserves in the roots, trunks and cordons of the vines, and will help vines acclimate to colder temperatures as the winter progresses. It is also important to bear in mind that from bud break until bloom, grapevines growth is mostly supported by those reserves stored in the vine's permanent structures. Leaves should be retained as long as possible to ensure good accumulation of reserves.

Photo Guide to Diseases of Cold Climate Grapes-UW-Madison

3) **Review soil and petiole analysis results** and plan for next season's fertilization program. Where there any nutrition issues during the growing season? Are they reflected in the results of the petiole analysis? This is an excellent time to put all the information together to look at the general picture of the vineyard, including the things that worked and did not work. You should pay special attention to your insect pest and disease management, and what could you have done better this past season.

Grapevine Nutrition-Northern Grape Project
Petiole Analysis as a Guide to Grape Vineyard Fertilization-University Minnesota

(***Source**: Wisconsin Fruit News, Volume 2, Issue 13, October 6, 2017*)

2018 Vintage Observations - Long Island

Alice Wise, Cornell University

Rather than recap the season's weather and growing conditions, here are the Long Island research vineyard's 2018 highlights along with a few lowlights:

Most interesting: Petit Manseng. This variety has tasty fruit and no cluster rot thus far which is impressive given the late ripening (picked 10-18 but could have lasted a bit longer). It is used for dessert wines in Virginia.

Uninvited visitor: cucumber beetles. The cucurbits on the LIHREC property were inundated and the beetles spilled over into the vineyard. They were not causing damage but were right in there with other insects feasting on damaged fruit. Hopefully this is an anomaly.

Most disappointing: Moscato Giallo. Vines are 6 yrs old and have never produced a decent crop. Vines don't fill the trellis despite TLC. Fruit this year seemed to stop ripening and had an odd waxy appearance.

Earliest ripening: Marquette, just after Labor Day. Fruit was beginning to break down at that point.

Tightest cluster: Arneis with tiny berries and very tight clusters but little to no cluster rot, though the fruit was harvested on the early side of ripeness.

Alice Wise in her experimental vineyard at the Long Island Horticultural Research and Extension Center at Riverhead, NY.
Photo by Tim Martinson

Sour rot champion: Tie – Sauvignon Blanc and the hybrid Petite Pearl. SB ripens early enough that it is smack in the middle of peak fruit fly season. Ditto for Petite Pearl, plus the birds hammer this variety.

Overall cluster breakdown/rot champion: Syrah. Nice fruit until the 3" rain last week.

Most surprising: Tie – Chardonnay and Pinot Gris. In a year where cluster rot was a challenge, these two varieties were relatively unscathed. There was a touch of botrytis/sour rot but far less than expected.

Annual headache: Downy mildew control. Historically, some years were difficult and others were a breeze. Lately the seasons have been mostly difficult.

Most unusual: Malbec - a somewhat finicky variety, there was very little cluster rot and berry set was good. In some years, fruit set is a challenge though this may be related to clone (clones 4 & 6).

Poor set winner: Own-rooted Merlot was the definite winner with a fair number of clusters that had a full rachis with only 5-6 berries.

Most promising: Regent. Sprayed minimally, this disease-resistant vinifera hybrid did get downy and powdery. That said, disease did not show up until mid-October which was post-harvest. Jury is still out on fruit quality as the vines are only 2 yrs old.

Most aggravating: Tie – fruit fly situation and leaf roll virus. Fruit flies used to be an occasional thing; now they seem to be an annual thing. Leaf roll virus was very prominently expressed this season including in vines that had never expressed symptoms.

Tastiest fruit: Tie – Barbera and the table grape Jupiter. Barbera wins hands down. Delicious fruit every season. Jupiter came as a surprise in a shipment of winegrapes. We elected to keep it and it has fast become a favorite of LIHREC staff.

Weirdest observation: On clone 4 Chardonnay, a handful of vines with substantial berry shrivel. There was no cluster rot and the rachis was green and intact. (***Source**: Cornell Veraison to Harvest, #8, October 19, 2018*)

GENERAL INFO

November 20th Crop Insurance Deadline Nears for Fruit Producers

Tom Smiarowski, UMass Extension

Deadline to **purchase** a **new** Federal Crop Insurance Policy for **apples, grapes** or **peaches**, or, to purchase **NAP** coverage on all other fruit crops is **November 20th**. The same November 20th deadline applies to **canceling** an existing Federal Crop Insurance policy along with the deadline to make **changes** to an existing Federal Crop Insurance policy.

Crop insurance for **apples** is available in **all** Massachusetts counties. Crop insurance for **grapes** is available in **Bristol** County. Crop insurance for **peaches** is available in **Bristol, Essex, Franklin, Hampshire, Hampden, Middlesex & Worcester** counties. Crops grown in other Massachusetts counties not covered as noted above may be insured by a **Written Agreement** (a process completed by a licensed Federal Crop Insurance agent using existing actuarial data from neighboring counties) if specific criteria are met. Other fruit crops may also be insured under a Written Agreement. If crop insurance is not available, protection is available through the Non-insured Crop Disaster Assistance Program (NAP) from the USDA - Farm Service Agency (FSA) Office that serves your farming operation. For 2019, only **Catastrophic (CAT)** level coverage (50% yield/55% price) is available since "Buy-Up" coverage under NAP expired on **9/30/18**.

Another option that fruit growers should explore is obtaining coverage through the **Whole Farm Revenue Protection Program (WFRP)**. WFRP is a revenue based policy that provides varying coverage levels to your historical average revenues using your IRS Schedule F to establish your farm's historic adjusted gross revenue. An important restriction is that you may not have a WFRP policy and have the Catastrophic (CAT) level of coverage on an insurable crop. Deadline to purchase a WFRP policy is **March 15th** but please bear in mind that if you have an existing CAT policy on either apples, grapes and/or peaches you must **cancel** that **CAT** coverage or upgrade to a "Buy-Up" policy by **November 20** to purchase WFRP coverage.

For more information on these and other related topics, you are encouraged to visit the RMA website at www.rma.usda.gov and the FSA website at www.fsa.usda.gov or contact UMass Extension Agricultural Risk Management Educators, Paul Russell at pmrussell@umass.edu or Tom Smiarowski at tsmiarowski@umass.edu.

Federal Crop Insurance policies are sold through licensed, private Federal Crop Insurance agents. A list of crop insurance agents is available on the RMA website at: http://prodwebnlb.rma.usda.gov/apps/AgentLocator/#/. NAP coverage is obtained at the local USDA-FSA Office that serves your farming operation.

UPCOMING MEETINGS:

November 3-5, 2018 – *MOFGA Farmer to Farmer Conference*. Point Lookout, Northport, ME. For more information and to register, go to: http://www.mofga.org/MOFGA-Events/mofgas-farmer-to-farmer-conference.

November 4, 2018 – *Massachusetts Cultivated Blueberry Grower's Assoc Winter Meeting*. 12-3pm. Harvey's Conference Center, 68 Hopkinton Rd., Rte 135, Westborough MA. Featured speaker Dr. Richard Cowles on Spotted Wing Drosophila. $27 per person for dinner; $10 additional charge for non-members. RSVP to Elisabeth Patt at eap1226@verizon.net.

November 7-8, 2018 – *Northeast Greenhouse Conference & Expo*. Boxboro Regency Hotel, 242 Adams Pl., Boxborough, MA For more information or to register, go to: https://www.negreenhouse.org/registration.html.

November 7-9, 2018 – *Great Lakes Fruit Workers Annual Meeting*. The Hotel Ithaca, 222 South Cayuga St. Ithaca, NY. For more information visit https://greatlakesfruitworkers.weebly.com/.

November 8, 2018 – *URI 2018 Tree and Small Fruit Pest Update*. 2pm-4pm. 60 Quaker Lane, Warwick - USDA Building. RSVP to Peggy Siligato at *401-874-5997 siligato@uri.edu* by Nov. 1.

November 10, 2018 – *UNH Extension Tree Fruit Risk Management Meeting*. 9am-3:30pm. Hillsborough County Complex, 329 Mast Rd., Goffstown NH. $15 lunch included. 4.5 pesticide recertification credits. RSVP required; contact George Hamilton at george.hamilton@unh.edu

November 15, 2018 – *SEMAP 2018 Annual Meeting*. Round the Bend Farm Learning Center, South Dartmouth, MA. Event free but RSVP requested for food planning. See: https://semaponline.org/.

November 27, 2018 – *CT Pomological Society Annual Meeting*. 8:00am – 3:15pm. Middletown Elks Lodge. Middletown Elks Lodge, 44 Maynard St, Middletown, CT. Cost ranges from $10- $35 plus $20 for lunch buffet. For more information contact Mary Concklin at mary.concklin@uconn.edu.

November 29-30, 2018 - *MA Farm Bureau Annual Meeting* - Sheraton Framingham Hotel, Framingham, MA. Massachusetts Farm Bureau Federation's (MFBF's) Annual Meeting will be hosted by Norfolk and Plymouth County Farm Bureaus. For more information see: Details here.

December 1, 2018 – *New England Vegetable & Berry Grower's Association Winter Meeting*. Holiday Inn Portsmouth 300 Woodbury Ave Portsmouth NH 03801For more information see http://nevbga.org/MeetingsNEVBGA.php and/or contact Chris Grant at: nevbga@gmail.com.

December 4-6, 2018 – *Great Lakes Expo*. Devos Place Conference Center and The Amway Grand Plaza Hotel, Grand Rapids, MI. Registration opens September 25, 2017. Go to http://glexpo.com for more details on program and registration.

December 6, 2018 – *2018 Mass. Farm & Sea to School Conference*, 8:30am – 4:30pm. Doubletree Hotel, 99 Erman Way, Leomminster, MA. For more information go to: https://www.massfarmtoschool.org/get-involved/conference/

December 12, 2018 – *Massachusetts Food System Forum* - 9:30 am - 3:30 pm, Doubletree Hotel, 99 Erdman Way, Leominster. Registration is $25. More information, and online registration here.

January 7, 2019 – *UConn Extension's Vegetable & Small Fruit Grower's Conference*, Maneely's Conference Center, South Windsor, CT. More information coming soon.

January 8, 2019 – *UConn Cut Flower Workshop*. 9am-3pm. Scout Hall, 28 Abbe Rd., East Windsor, CT. $50 includes refreshments and lunch. Registrations due by Dec. 28, 2018. For more information contact Mary Concklin at mary.concklin@uconn.edu.

January 9-11, 2019 – *North American Raspberry & Blackberry Conference*. Savannah Georgia. For program information and to register, go to: http://www.raspberryblackberry.com/2019-north-american-raspberry-blackberry-conference/.

February 3-6, 2019 – *North American Strawberry Growers Association Annual Meeting & 9th North American Strawberry Symposium*, Wyndham Orlando Resort, Olando FL. For more information or to register see: https://nasga.org/n-american-strawberry-growers-conference.htm

February 27-28, 2019 – *Harvest New England Marketing Conference and Trade Show*. Sturbridge Host Hotel, Sturbridge MA. More information coming soon.

March 14, *Pollinator Habitat Conference*, CT Ag. Experiment Station. Save the date. More information coming soon.

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