

# GREAT LAKES **EXPO**



FRUIT, VEGETABLE & FARM MARKET

Sponsored by  
**Michigan State Horticultural Society**  
and **The Michigan Vegetable Council, Inc.**  
in cooperation with  
**MSU Extension**



Sponsored by  
**Metropolitan Detroit Flower Growers Association**  
and  
**Western Michigan Greenhouse Association**  
in cooperation with **MSU Extension**



DECEMBER 10-12, 2019  
GRAND RAPIDS, MICHIGAN  
**GLEXP.COM**

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## GREENHOUSE EXPO EDUCATION PROGRAM SCHEDULE

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- A Sampler on Sampling .....

#### 10:00 AM

- Contemporary Containers: Combining Function and Fab..... 15

### TUESDAY AFTERNOON

#### 2:00 PM

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- Understanding the Fundamentals of Systemic Insecticides..... 20-21

#### 3:00 PM

- The Shopper's Journey..... 21
- New Solutions for Floriculture Disease Problems .....

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### WEDNESDAY AFTERNOON

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# GREAT LAKES EXPO

## EDUCATION PROGRAM SCHEDULE

### TUESDAY MORNING

#### 9:00 AM

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- Berries ..... 11
- Bilingual Farmworker Produce Safety Training Tools & Your Certification(s) ..... 12
- Farm Marketing I ..... 12
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### WEDNESDAY MORNING

#### 9:00 AM

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# GREAT LAKES EXPO

## EDUCATION PROGRAM SCHEDULE

### THURSDAY MORNING

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### THURSDAY AFTERNOON

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#### 9:30 AM

- Farm Efficiency .....38
- Farm Succession.....38
- General I .....38

#### 1:00 PM

- Farm Efficiency .....39
- Farm Succession.....39
- General II .....39

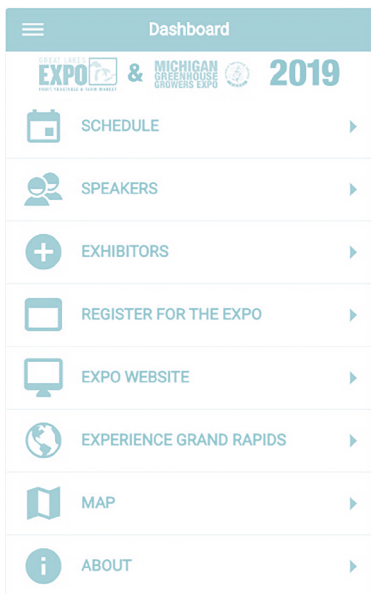
#### 3:15 PM

- Keynote..... 39



### DOWNLOAD OUR CONFERENCE APP

Search for Attendee Mobile in your app store. Once downloaded, search for the title: Great Lakes EXPO. You can also use a QR reader and scan the QR Code below.



# CONFERENCE INFORMATION

## REGISTRATION

The registration area is located in the Grand Gallery of DeVos Place Convention Center. The entrance to DeVos Place is on Monroe Avenue. The enclosed walkway from the Amway Grand Plaza Hotel can also be used to enter the convention center. Registration opens at 7:30 a.m. each day. It will close at 5:00 p.m. on Tuesday and Wednesday and at noon on Thursday.

Your registration entitles you to admission to the trade show and education sessions for all three days of the conferences. Those who pay the regular registration fee for the fruit, vegetable, fruit/vegetable or greenhouse options receive free subscriptions to the fruit, vegetable or greenhouse publications listed on the registration form. The fruit, vegetable and fruit/vegetable options also include membership in the Michigan State Horticultural Society and/or the Michigan Vegetable Council.

## SPECIAL THURSDAY REGISTRATION FEE

A special registration fee of \$55 is available for admission to the trade show and education sessions on Thursday. This is good for attendance on Thursday ONLY. The special Thursday registration fee does not include free subscriptions or memberships.

## MSU EXTENSION BOOTH, OTHER INFORMATION BOOTHS

MSU Extension will provide crop and pest management information at its booth in the Grand Gallery concourse. There is a charge for most of the bulletins and other educational materials offered.

A number of government agencies, commodity groups and other organizations have booth displays to provide useful information for growers and farm marketers.

## TRADE SHOW

The trade show features a variety of products, services and information for fruit, vegetable and greenhouse growers, as well as farm marketers. Again this year a separate trade show area featuring exhibitors with products for retail farm marketers is being offered adjacent to the Farm Marketing and Apple meeting rooms in the Ballroom area of DeVos Place. Make sure you visit both exhibit halls. The listing of exhibitors in this program includes hall location and product categories. The trade show will be open during the following times:

<b>Tuesday, December 10</b> .....	<b>8:00 AM – 5:30 PM</b>
<b>Wednesday, December 11</b> .....	<b>8:00 AM – 5:30 PM</b>
<b>Thursday, December 12</b> .....	<b>8:00 AM – 1:00 PM</b>

# CONFERENCE INFORMATION

## EDUCATION PROGRAM

All sessions and workshops offered in the education programs of the Great Lakes Fruit, Vegetable and Farm Market EXPO and the Michigan Greenhouse Growers EXPO are open to all attendees.

## COAT CHECK

A complimentary coat check area is available on the skywalk level of the convention center.

## PARKING, LODGING, DINING

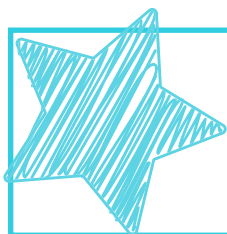
The Grand Rapids Convention Bureau has an information table in the Grand Gallery concourse area. You can pick up parking maps, restaurant and hotel/motel lists, as well as information on things to see and do while you are in Grand Rapids. These restaurants in the Amway Grand Plaza Hotel will be open at lunch time: The Kitchen Counter by Wolfgang Puck, The Kitchen by Wolfgang Puck, GP Sports and Starbucks. The concierge at the Amway Grand Plaza Hotel is able to make recommendations and reservations for you.

## BUFFET LUNCHEON IN CONVENTION CENTER

A hot buffet luncheon will be available in the Grand Gallery near the river side entrance from 11:00 a.m. - 1:30 p.m. on Tuesday and Wednesday. This inclusive one-trip buffet will be a full hot lunch including salad, dessert and beverage. Cost for the buffet is \$13 per person and includes tax and gratuity.

## CONCESSION STANDS

Concession stands are located in DeVos Place just inside the three entrances to the trade show exhibits. One or more of the stands will be open from 8:00 a.m. to 4:00 p.m. on Tuesday and Wednesday and from 8:00 a.m. to 1:00 p.m. on Thursday. Look for signage to direct you to the stands that are open. All three concession stands will be open from 11:30 a.m. to 1:00 p.m. on Tuesday and Wednesday.



**Thank you**  
**Great American Media**  
for sponsoring the wifi  
throughout DeVos Place!

## CIDER CONTEST

### CIDER JUDGING

**Wednesday, December 11, 1:30 PM - 4:00 PM**

**Gallery Overlook (upper level) Room G H, DeVos Place**

The cider contest will judge the best cider produced by Michigan cider makers. To enter, cider producers must submit two 1-gallon cider jugs at the Exhibitor Registration Desk in the Grand Gallery concourse in DeVos Place on Tuesday from 9:00 a.m. to 5:00 p.m., or on Wednesday from 9:00 a.m. to noon. No entries will be accepted after noon on Wednesday. Cider samples must be thawed by 1:00 p.m. on Wednesday (this is the responsibility of each cider producer).

Judging will be open for viewing. Winners will be announced at the EXPO Banquet on Wednesday evening.

### Tasting of the Winning Ciders

**Thursday, December 12, 8:00 AM - 9:00 AM**

**Grand Gallery Concourse, DeVos Place**

Sample the winning ciders from the cider contest. Don't miss this chance to taste

## MSHS/MVC ANNUAL MEETINGS

### MICHIGAN STATE HORTICULTURAL SOCIETY ANNUAL MEETING

**Tuesday, December 10, 4:30 PM**

**Grand Gallery Room C, DeVos Place**

All MSHS members welcome to attend.

### THE MICHIGAN VEGETABLE COUNCIL, INC. ANNUAL MEETING

**Wednesday, December 11, 11:30 AM**

**Grand Gallery Room C D, DeVos Place**

All MVC members welcome to attend.

## AGRICULTURAL ORGANIZATION

### MICHIGAN CIDER MAKERS' GUILD ANNUAL MEMBER GATHERING

**Wednesday, December 11, 11:00 AM**

**Grand Gallery Room D, DeVos Place**

Held at the conclusion of the sweet  
cider session.

### CELERY RESEARCH INC. ANNUAL MEETING

**Wednesday, December 11, 4:00 PM**

**Grand Gallery Overlook A B, DeVos  
Place**

Held at the conclusion of the celery session.

### MICHIGAN ONION COMMITTEE ANNUAL MEETING

**Wednesday, December 11, 12:45 PM**

**Grand Gallery Overlook C D, DeVos  
Place**

## SPECIAL EVENTS

### **MICHIGAN APPLE GROWERS LUNCHEON**

**Tuesday, December 10, 11:30 AM - 1:30 PM**

**Ambassador Ballroom, Amway Grand Plaza Hotel**

This is a free luncheon program open to all Michigan apple growers. The luncheon is sponsored by the Michigan Apple Committee and a number of industry sponsors. A featured speaker will entertain and inform those attending. This year's program also features the crowning of the 2019 Michigan Apple Queen by the reigning Michigan Apple Queen, Emily Kropf. There will also be industry updates from the Michigan Apple Committee and USApple during the program.

### **MIDWEST PICKLE ASSOCIATION, PICKLE & PEPPER RESEARCH COMMITTEE**

**Tuesday, December 10, 11:00 AM - 4:00 PM**

**Gallery Overlook, Room G H, DeVos Place**

Members of the Midwest Pickle Association and the Pickle & Pepper Research Committee for MSU are invited to attend this special research reporting and business program. The program includes a Working Lunch; joint Business Meeting of both organizations; and Cucumber Research Reporting by researchers from Michigan State University, University of Wisconsin, and USDA Agricultural Research Service.

### **MICHIGAN AGRITOURISM LUNCHEON**

**Wednesday, December 11, 11:30 AM**

**Reserve Wine & Food, 201 Monroe Ave. NW, Grand Rapids**

This is a free luncheon for all Michigan Agritourism members, but RSVP is required.

### **TRADE SHOW RECEPTION**

**Tuesday, December 10, 4:00 PM - 5:30 PM**

**Wednesday, December 11, 4:00 PM - 5:30 PM**

**Exhibit Hall, DeVos Place**

Please join us in the back of the exhibit hall Tuesday and Wednesday for a reception with the exhibitors. Cash bar and light refreshments will be offered.

### **FEATURED SPEAKERS**

**Paige J. Pratt, PhD., Pratt Cattle Company**

**Thursday, December 12, 9:30 AM – 10:30 AM & 1:00 PM – 2:00 PM**

**Grand Gallery E F, DeVos Place**

Dr. Paige Pratt grew up on a family farm/ranch in the Flinthills of Kansas. Paige and her husband, Jason, own and operate Pratt Cattle Company, a purebred Angus operation located in Southwest Virginia. Paige is a professional speaker and farm transition facilitator. She enjoys assisting families in developing asset and leadership transition plans for farming operations.

**Ted Matthews, Minnesota Rural Mental Health**

**Thursday, December 12, 3:15 PM – 4:15 PM**

**Grand Gallery A B, DeVos Place**

Ted Matthews is a mental health practitioner with over 30 years of experience in counseling in rural areas. His focus for the past 2 decades has been providing



## SPECIAL EVENTS

farmer mental health support through the subsidized Minnesota Department of Ag. program. This program was created by Matthews and an FBM instructor 20 years ago when they realized how undeserved the farming community is. Ted has been the director of mental health services during 5 natural disasters. Matthews provides outreach training and public speaking related to farm stressors nation wide. He also has extensive counseling experience in the areas of PTSD, crisis intervention, family issues, suicidology and domestic abuse. Featured on the Huffington Post, MPRNews, CNN, AgriNews, Successful Farming, Prairie Farmer and many others, Ted offers his expertise to help the generation population to better understand the farming culture.

### **PRAYER BREAKFAST**

**Wednesday, December 11, 7:00 AM - 8:30 AM**

**Imperial Ballroom, Amway Grand Plaza Hotel**

#### **Larry Bodtke**

After living for six years of his early life as a city boy in Dearborn Heights (a suburb of Detroit) Larry's parents, Ron and Phyllis Bodtke moved the family to Grand Junction, Michigan to a fifteen acre blueberry farm. Larry earned a Bachelor's Degree in Animal Science from Michigan State University and then worked as an Ag lender for the Farm Credit System and a Commercial Bank before coming back to the family farm in 1989. He now farms about 1000 acres of blueberries along with his wife, brother, sister, and three nephews. The family also partners in a 600 acre blueberry farm operating in Oregon and Washington which is about 30% organic. In addition to blueberries, the family farms 2800 acres of grain and owns Beeches Golf Club in South Haven, Michigan. They just celebrated their 50th Anniversary in the blueberry business.



Larry is a past President of The Michigan State Horticultural Society, has served on the Board of Greenstone Farm Credit and as a Deacon and Elder at Hope Reformed Church in South Haven.

Larry has been married to Liana for 35 years. They have four adult children and four grandchildren.

Sixty years of life, with half of those being in full-time farming has brought much joy along with many challenges. He will be speaking today about sustaining joy through adversity.

Tickets are \$22 and should be purchased through pre-registration or on Tuesday at registration.

### **EXPO BANQUET**

**Wednesday, December 11, 6:30 PM**

**Ambassador Ballroom (concourse level), Amway Grand Plaza Hotel**

The banquet will feature a serving of Michigan foods and wines. The program features recognition of people for outstanding service to our fruit and vegetable industries. This year recipients of the Fruit and Vegetable Industry Scholarships and Jordan Tatter Scholarships will be recognized as well. And the winning entries in this year's Cider Contest will be announced.

Tickets are \$40. Advance purchase through pre-registration is recommended. A limited number of tickets will be available at registration until noon on Wednesday.

## EDUCATION PROGRAM INFORMATION

**Education Session Room Locations:** All education sessions will be held in the DeVos Place Convention Center's meeting rooms. The Grand Gallery Rooms are located on the main level of the convention center. The Gallery Overlook Rooms are located on the upper level. Ballrooms A and D are on the main level adjacent to the Farm Market Exhibit Hall. The River Overlook Rooms are on the upper level on the west (river) side of DeVos Place (take the escalator on the west side of the Grand Gallery). There is a map on the last page of the booklet.

**Session Summaries:** Speakers in each education session have been asked to submit a summary of their presentation. Copies of presentation summaries will be compiled by session and distributed at the session. If there are extra copies, they will be available at the MSU Extension booth after the session. The summaries will also be posted on the Great Lakes EXPO's website (GLEXPO.com) after the conferences and also on the conference app.

**Educational Posters:** Educational posters will be available for viewing in the Grand Gallery of DeVos Place outside the meeting rooms.

**Education Credits for Pesticide Applicators and Certified Crop Advisors:** Many of the education sessions offer re-certification credits pesticide applicators and continuing education units for Certified Crop Advisors. The pesticide re-certification credits shown in the session listings are for Michigan and Ohio Pesticide Applicators.

Certified Crop Advisors from Michigan, Ohio, Indiana, Illinois, Wisconsin and the Province of Ontario who attend EXPO education sessions are eligible to receive continuing education units under reciprocity agreements between the local crop advisory committees. Education units are offered in the following disciplines: CM (crop management), PM (pest management) and SW (soil and water).

**A dedicated DASH shuttle bus will run every 10 minutes from Dash Shuttle Lot - Area #9, located at 250 Seward NW (just a few blocks over the river), to the front of DeVos Place.**

**Shuttle Schedule:**

- **Monday: December 9: 8:30am-6:30pm**
- **Tuesday, December 10: 7:00am-6:30pm**
- **Wednesday, December 11: 7:00am-6:30pm**
- **Thursday, December 12: 7:00am-5:00pm**

# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY MORNING

### ASPARAGUS

**WHERE:** Grand Gallery Overlook C D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (1.5)

**MODERATOR:** Ben Werling, Michigan State University Extension

**9:00 AM** **Managing for Postharvest Quality in Asparagus**

- Trevor Suslow, Produce Marketing Association

**9:30 AM** **Asparagus Pathology Update (OH 2B, 0.5 hrs)**

- Mary Hausbeck, Michigan State University

**10:00 AM** **Asparagus Nitrogen Management Update**

- Zack Hayden, Michigan State University Horticulture Department

**10:30 AM** **Impact of Rye Cover Crops and Asparagus Varieties on Timing of Spear Emergence**

- Dan Brainard, Michigan State University Horticulture Department

**11:00 AM** **Session Ends**

### BERRIES

**WHERE:** Grand Gallery E F, DeVos Place

**MI RECERTIFICATION CREDITS:** MI Recertification Credits: 2 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Doug DeLeo, MSHS Board, Bangor, MI

**9:00 AM** **Managing the SWD in Raspberries**

- Heather Leach, Pennsylvania State University (Department of Entomology)

**9:20 AM** **Alternate-year Production in Floricane Raspberry as a Labor-saving Practice**

- Lisa DeVetter, Washington State University Northwestern Washington Research and Extension Center

**9:40 AM** **Are There Opportunities in High Tunnel Blueberry Production for Michigan Growers?**

- Carlos Garcia-Salazar, Michigan State University Extension

**10:10 AM** **Botrytis Fungicide Resistance**

- Tim Miles, Michigan State University (Department of Plant, Soil and Microbiology)

**10:30 AM** **Impacts of Non-degradable and Biodegradable Plastic Mulches on Establishment and Yields of Spring- and Late-summer Planted Floricane Raspberry**

- Lisa DeVetter, Washington State University Northwestern Washington Research and Extension Center

**11:00 AM** **Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

TUESDAY MORNING

## BILINGUAL FARMWORKER PRODUCE SAFETY TRAINING TOOLS FOR FARM MANAGERS AND CREW SUPERVISORS

**WHERE:** Grand Gallery D, DeVos Place

**9:00 AM** This free workshop will train farm managers and crew leaders to conduct successful produce safety training programs that meet the requirements of the Food Safety Modernization Act (FSMA) and contribute to a positive workplace culture that supports produce safety.

Gain tools and resources for building a culture of produce safety among farm employees. Explore evidence-based strategies for adult education, including tips for non-English speaking and low English literacy audiences

- Garrett Ziegler, Michigan State University Extension

**10:00 AM** Session Ends

## MAKING YOUR CERTIFICATION(S) WORK FOR YOU

**WHERE:** Grand Gallery D, DeVos Place

**10:00 AM** Join food safety and organic certifiers, buyers, and farmers for a panel discussing how to communicate your certifications, or lack thereof, with potential buyers.

**11:00 AM** Session Ends

## FARM MARKETING I

**WHERE:** Ballroom A, DeVos Place

**MODERATOR:** Bob Tritten, Michigan State University Extension

**9:00 AM** Educating Consumers: Consumer Trends

- Paige Pratt, Pratt Cattle Company

**10:00 AM** Michigan Agritourism Update

- Janice Benson, MATA
- Natalie Klackle, MATA

**10:15 AM** Dull's Tree Farm and Pumpkin Harvest Farm Progress Over the Years

- Tom Dull, Dull's Tree Farm & Pumpkin Harvest

**11:00 AM** Session Ends

## GRAPE I

**WHERE:** Grand Gallery C, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Katherine East, Michigan State University Extension

**9:00 AM** Whole-canopy Source-sink Balance at Bloom Dictates Fruit-Set and the Impact of Early Leaf Removal

- Paolo Sabbatini, Michigan State University (Department of Horticulture)

**9:30 AM** Mapping Vinifera Suitability Across Michigan - Finding the Best Sites

- Erin Bunting, Michigan State University

# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY MORNING

### 10:00 AM **Sampling Strategies for Virus Detection**

- Laura Miles, Michigan State University (Department of Plant, Soil and Microbiology)

### 10:30 AM **Spotted Lanternfly: Detection and Management (OH 2B, 0.5 hrs)**

- Heather Leach, Pennsylvania State University (Department of Entomology)

### 11:00 AM **Session Ends**

## PICKLING CUCUMBER

**WHERE:** Grand Gallery Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (0.5)

**MODERATOR:** Ben Phillips, Michigan State University Extension

### 9:00 AM **Downy Mildew Management in Pickling Cucumbers (OH 2B, 0.5 hrs)**

- Mary Hausbeck, Michigan State University

### 9:30 AM **Worker Protection Standards for Pickling Cucumber Growers (OH CORE, 0.5 hrs)**

- Ben Phillips, Michigan State University Extension

### 10:30 AM **Creating a Culture of Food Safety in Pickling Cucumbers**

- Phil Tocco, Michigan State University Extension

### 10:30 AM **Perspectives on Parthenocarpic Cucumber Production and Use**

- Andreas Herr, BASF

### 11:00 AM **Session Ends**

## TOMATO/PEPPER/EGGPLANT

**WHERE:** Grand Gallery A B, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1 (presentations as marked)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Trevor Meachum, High Acres Fruit Farm

### 9:00 AM **Invasive Insects: Should Vegetable Growers be Concerned? (OH 2B, 0.5 hrs)**

- Dr. Mike Reinke, Michigan State University Extension

### 9:30 AM **PACA: Perishable Agricultural Commodities Act**

- Elizabeth Rumley, The National Agricultural Law Center

### 10:00 AM **Pepper Diseases and Their Control (OH 2B, 0.5 hrs)**

- Sally Miller, Ohio State University

### 10:30 AM **Pepper Production and Fertility**

- Dr. Timothy Coolong, University of Georgia

### 11:00 AM **Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY MORNING

### TREE FRUIT

**WHERE:** Ballroom D, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (0.5)

**MODERATOR:** Scott Hassle, MSHS Board, Hartford, MI

**9:00 AM Farming and Food Narrative Project: Toward an Informed Public  
Conversation about Farming and Farm Practices**

- Dr. Larry Gut, MSU Dept. of Entomology
- Michael Rozyne, Red Tomato

**9:25 AM Michigan Pollinator Initiative**  
• Ana Heck, Michigan State University

**9:30 AM Permitting Requirements for Managing Wildlife in Orchards**  
• Timothy Wilson, USDA-APHIS Wildlife Services

**10:00 AM Cold Hardiness and Winter Injury of Tree Fruits**  
• Amy Irish-Brown, Michigan State University

**10:30 AM MSU Samurai Wasp Dispersal Project: Rearing, Releasing and  
Recapturing a Parasitoid of BMSB (OH 2B, 0.5 hrs)**  
• Marianna Szucs, Michigan State University, Department of  
Entomology

**11:00 AM Session Ends**

# GREENHOUSE EXPO EDUCATION PROGRAM

## TUESDAY MORNING

### Art and Science of Pricing

**WHERE:** River Overlook A B, DeVos Place

Many retailers believe that pricing is the product of a formula. While it's true that formulas can be a great place to start, they shouldn't be the end. This session is designed to help professionals understand all the components of pricing, beginning with costs but going beyond formulas.

**MI RECERTIFICATION CREDITS:** 2 (Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (PM)

**MODERATOR:** Jim Brouwer, WMGA

**SPONSORED BY:** Proven Winners

**9:00 AM** **Bridget Behe, Michigan State University**

**9:50 AM** **SESSION ENDS**

### A Sampler on Sampling

**WHERE:** River Overlook E F, DeVos Place

Growers will learn how to diagnose common plant problems by properly sampling for: insect and disease presence, ethylene damage, water quality, and leaf tissue analysis. Stop guessing this season and start confirming!

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** (presentations as marked)

**CCA CREDITS:**

**MODERATOR:** Heidi Lindberg, Michigan State University Extension

**SPONSORED BY:** Michigan Plant Growers Co-op

**9:00 AM** **Garrett Owen, Michigan State University Extension**  
**Jeremy Jubenville, Michigan State University Extension**  
**Heidi Lindberg, Michigan State University Extension**

**10:30 AM** **SESSION ENDS**

### Contemporary Containers: Combining Function and Fab

**WHERE:** River Overlook C D, DeVos Place

Join Kari to learn about finding balance in the plant fight club of combo containers. Audience will explore the pros and cons of flower, herb, and veggie contemporary containers.

**MI RECERTIFICATION CREDITS:**

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Erik Runkle, Michigan State University

**SPONSORED BY:** Scotts MiracleGro

**10:00 AM** **Kari Mazzaferro, Scotts MiracleGro**

**10:50 AM** **SESSION ENDS**

# GREAT LAKES EXPO EDUCATION PROGRAM

TUESDAY AFTERNOON

## WORKING WITH KNEE PAIN IN AGRICULTURE

WHERE: Grand Gallery Overlook A B, DeVos Place

**1:00 PM** Knee injuries and arthritis are very painful and make it difficult for many growers and farmers to do their work. How can I check orchards and fix irrigation if I cannot walk well? How can I plant vegetables or pick produce if I cannot kneel? Learn how to improve knee health with physical therapy and about special tools and equipment accommodations and that can help get the job done in spite of knee pain. Attendees can receive free joint pain screenings from Davenport University occupational therapists at the AgrAbility booth to get personal advice about knee pain.

- Ned Stoller, Easterseals Michigan AgrAbility
- Matthew Schmitz, Hulst-Jepsen Physical Therapy

**1:50 PM** Session Ends

## APPLE I

WHERE: Ballroom D, DeVos Place

MI RECERTIFICATION CREDITS: 2 (1C, Comm CORE, Priv Core)

OH RECERTIFICATION CREDITS: 0.5 (presentations as marked)

CCA CREDITS: PM (0.5), CM (0.5)

MODERATOR: Brett Anderson, MSHS Board, Sparta, MI

**2:00 PM** Apple Replant Project Update

- Dr. Julianna Wilson, Michigan State University Department of Entomology

**2:20 PM** Key Management Factors That are Critical for Identifying and Managing Bitter Pit Risk in Honeycrisp Apple

- Dr. Lee Kalcits, Washington State University

**3:00 PM** Postharvest Challenges for Honeycrisp and Gala apples

- Dr. Jennifer DeEll, OMAFRA

**3:30 PM** Exploring New Options for Managing Codling Moth, Brown Marmorated Stink Bug and San Jose Scale (OH 2B, 0.5 hrs)

- Dr. Larry Gut, MSU Dept. of Entomology

**4:00 PM** Session Ends

## CARROT

WHERE: Grand Gallery E F, DeVos Place

MI RECERTIFICATION CREDITS: 2 (1B, Comm CORE, Priv Core)

OH RECERTIFICATION CREDITS: 0.5 (presentations as marked)

CCA CREDITS: PM (1), CM (1)

MODERATOR: Ben Werling, Michigan State University Extension

**2:00 PM** Impact of Ozonation and Other Sanitizers on Storability of carrots

- Trevor Suslow, Produce Marketing Association

**2:40 PM** Mechanical Cultivation and Cover Crops for Weed Control in Carrots

- Dan Brainard, Michigan State University Horticulture Department



# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY AFTERNOON

**3:00 PM Aster Yellows Phytoplasma and Woodiness in Carrots**

- Carolyn Malmstrom, Michigan State University

**3:30 PM Investigating Nematicides and Cover Crops for Integrated Nematode Control (OH 2B, 0.5 hrs)**

- Marisol Quintanilla-Tornel, Michigan State University
- Elizabeth Darling, Michigan State University

**4:00 PM Session Ends**

## FARM MARKETING II

**WHERE:** Ballroom A, DeVos Place

**MODERATOR:** Garrett Ziegler, Michigan State University Extension

**2:00 PM Making What's Old New Again: Refurbishing Buildings for Profit Centers**

- Tom Dull, Dull's Tree Farm & Pumpkin Harvest

**2:40 PM Selling More Produce Through On-Line Sales**

- Ruth Ann Roney, Tuttle Orchards

**3:20 PM Animal Liability: Who is Responsible?**

- Elizabeth Rumley, The National Agricultural Law Center

**4:00 PM Session Ends**

## FOOD SAFETY

**WHERE:** Grand Gallery Overlook C D, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**CCA CREDITS:** PM (2)

**MODERATOR:** Phil Tocco, Michigan State University Extension

**2:00 PM Wildlife Management with an Eye to Food Safety**

- Erin Lizotte, Michigan State University
- James DeDecker, Michigan State University

**2:10 PM FSMA Produce Safety Inspections: Year 1**

- Amber Matulis, MDARD

**2:30 PM E. Coli on the Move: The Potential Role of Flies in Transporting Foodborne Pathogens to Produce**

- Paula Rivadeneira, University of Arizona Cooperative Extension

**3:00 PM Stalking Listeria in Apple Packing Houses: Best Handling Practices to Avoid an Outbreak.**

- Elliot Ryser, Michigan State University

**3:30 PM Potential Produce Safety Risks Posed by Hydroponic Production**

- Robson Machado, University of Maine Cooperative Extension

**4:00 PM Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY AFTERNOON

### GRAPE II

**WHERE:** Grand Gallery C, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (1.5), CM (0.5)

**MODERATOR:** Katherine East, Michigan State University Extension

**2:00 PM      Wasp Composition and Phenology in Cold Climate Grapes**

- Christelle Guedot, University of Wisconsin - Madison

**2:30 PM      Fungicide Resistance Management in Grapes: Powdery Mildew and Botrytis**

- Tim Miles, Michigan State University (Department of Plant, Soil and Microbiology)

**3:00 PM      A Washington Perspective on Nematodes in Grapevines**

- Katherine East, Michigan State University Extension

**3:30 PM      Cordon Renewal Strategies for Cold Injured Merlot Grapevines**

- Hemant Gohil, Rutgers University

**4:00 PM      Session Ends**

### GREENHOUSE VEGETABLE PRODUCTION

**WHERE:** Grand Gallery Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (0.5)

**MODERATOR:** Chris DiCicco

**2:00 PM      ASD: Anaerobic Soil Disinfestation**

- Sally Miller, Ohio State University

**2:30 PM      Producing High Quality Vegetable Transplants**

- Dr. Timothy Coolong, University of Georgia

**3:00 PM      Worker Protection Standards for Greenhouse Workers (OH CORE, 0.5 hrs)**

- Ben Phillips, Michigan State University Extension

**3:30 PM      Maximizing Greenhouse Production Efficiency**

- Ben Hartman, Clay Bottom Farms

**4:00 PM      Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## TUESDAY AFTERNOON

### POTATO

**WHERE:** Grand Gallery D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1.5 (presentations as marked)

**CCA CREDITS:** PM (2)

**MODERATOR:** Monica Jean, Michigan State University Extension

**2:00 PM**      **Colorado Potato Beetle Insecticide Resistance Management (OH 2B, 0.5 hrs)**

- Zsofia Szendrei, Michigan State University

**2:30 PM**      **Potato Pathology Update (OH 2B, 0.5 hrs)**

- Jaime Wilbur, Michigan State University

**3:00 PM**      **Nematode Management in Potatoes (OH 2B, 0.5 hrs)**

- Marisol Quintanilla-Tornel, Michigan State University
- Luisa Parrado, Michigan State University

**3:30 PM**      **Enviroweather Tools for Potato Production**

- Keith Mason, Michigan State University

**4:00 PM**      **Session Ends**

### SWEET CORN

**WHERE:** Grand Gallery A B, DeVos Place

**CCA CREDITS:** PM (0.5), CM (1.5)

**MODERATOR:** Marissa Schuh, Michigan State University Extension

**3:00 PM**      **A Short History of Sweet Corn**

- Ron Goldy, Michigan State University Extension

**2:00 PM**      **Tar Spot: What Sweet Corn Growers Need to Know**

- Martin Chilvers, Michigan State University

**3:20 PM**      **Plasticulture and Sweet Corn: Grower Panel**

- Mike Fusilier, Fusilier Family Farms
- Dwight Eichelberg, Eichelberg Farms

**2:30 PM**      **A Common Sense Approach to New Varieties**

- Derrill Kregel, Rispens Seeds

**4:00 PM**      **Session Ends**

### FRUIT VARIETY SHOWCASE

**WHERE:** Ballroom D, DeVos Place

**4:30 PM–5:30 PM**

Fruit Varieties and strains gathered from MSU variety trials and various locations around North America will be displayed. Sample and hear discussions of new and notable apple varieties by MSU apple specialists and nursery representatives. The display will be available to view both Tuesday and Wednesday in the meeting room used for the tree fruit and apple sessions.

# GREAT LAKES EXPO EDUCATION PROGRAM

**TUESDAY AFTERNOON**

## FARM MARKETING AND AGRITOURISM ROUNDTABLE

**WHERE:** Ballroom A, DeVos Place

**5:00 PM – 6:30 PM**

Come to this popular “town-hall-style” sessions to share ideas with your farm marketing and agritourism colleagues. We’ll hear from you about what worked and what didn’t this year, what to try next year, how you might conquer your customer, employee, and marketing challenges, and more. This session continues to grow every year so get there early. Session concludes promptly at 6:30pm.

- Bob Tritten, Michigan State University Extension
- Ron Goldy, Michigan State University Extension
- Mark Longstroth, Michigan State University Extension
- Garrett Ziegler, Michigan State University Extension

# GREENHOUSE EXPO EDUCATION PROGRAM

**TUESDAY AFTERNOON**

## The Latest and Greatest: MSU Research Update

**WHERE:** River Overlook A B, DeVos Place

MSU faculty will share the latest on their findings from research projects supported by the Western Michigan Greenhouse and Metro Detroit Flower Growers Associations. Learn about how signs influence willingness-to-purchase, speeding up production time with LEDs, wood fiber substrates, increasing shelf life of annuals, nutritional monitoring of herbs, and the impact of the 2019 MSU Trial Gardens internship.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (PM)

**MODERATOR:** Roberto Lopez, Michigan State University Extension

**SPONSORED BY:** Syngenta Flowers

**2:00 PM**

- Bridget Behe, Michigan State University
- Mary Hausbeck, Michigan State University
- Garrett Owen, Michigan State University Extension
- Erik Runkle, Michigan State University Horticulture Department
- Roberto Lopez, Michigan State University

**2:50 PM**

**SESSION ENDS**

## Understanding the Fundamentals of Systemic Insecticides (OH 6D, 0.5 hrs)

**WHERE:** River Overlook E F, DeVos Place

This presentation will discuss the characteristics and types of systemic insecticides that have been used and are currently available for use in horticultural cropping

# GREENHOUSE EXPO EDUCATION PROGRAM

## TUESDAY AFTERNOON CONTINUED

systems. The presentation will cover the targeted insect pests of systemic insecticides, and also address the issues associated with the direct and indirect effects (or supposed effects) of systemic insecticides on pollinators.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** 1 (PM)

**MODERATOR:** Tom Dudek

**SPONSORED BY:** OHP

**2:00 PM** • Raymond Cloyd, Kansas State University

**2:50 PM** **SESSION ENDS**

### The Shopper's Journey

**WHERE:** River Overlook C D, DeVos Place

Four Michigan retailers collaborated with MSU researchers earlier this year by using eye-tracking to record the shopper's journey. Results show how shoppers view plant displays and make product selections. Implications for improving store layout, displays, and the shopping experience will be discussed.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**MODERATOR:** Garrett Owen, Michigan State University Extension

**3:00 PM** • Bridget Behe, Michigan State University

• Mary Tuski, Horticulture Research Institute

**3:50 PM** **SESSION ENDS**

### New Solutions for Floriculture Disease Problems (OH 6D, 0.5 hrs)

**WHERE:** River Overlook A B, DeVos Place

This session will highlight the latest solutions for flower/leaf blights and root rots of floriculture crops based on MSU research. Practical, ready-to-use recommendations will be provided.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** 1 (PM)

**MODERATOR:** Jeremy Jubenville, Michigan State University Extension

**SPONSORED BY:** Nufarm Americas Inc

**3:00 PM** • Mary Hausbeck, Michigan State University

**3:50 PM** **SESSION ENDS**

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY MORNING

### BLUEBERRY I

**WHERE:** Grand Gallery A B, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Mike DeGrandchamp, MSHS Board, South Haven, MI

**9:30 AM**      **Changing Bee Hive Numbers and Using Pheromones to Increase Blueberry Pollination**

- Lisa DeVetter, Washington State University Northwestern Washington Research and Extension Center

**9:00 AM**      **Conserving Wild Bees in Blueberry Farms**

- Kelsey Graham, Michigan State University

**9:50 AM**      **Fungicide Resistance in Blueberry Diseases (OH 2B, 0.5 hrs)**

- Tim Miles, Michigan State University (Department of Plant, Soil and Microbiology)

**10:10 AM**     **What Have we Learned About Blueberry Stem Gall Wasp**

- Philip Fanning, Michigan State University

**10:40 AM**     **GMOs? GMOs? We Don't Need No Stinking GMOs**

- Patrick Edger, Michigan State University

**11:00 AM**     **Session Ends**

### FARM MARKETING III

**WHERE:** Ballroom A, DeVos Place

**MODERATOR:** Dr. Ron Goldy, Michigan State University Extension

**9:00 AM**      **What Type of Business Structure Should You Have?**

- Rusty Rumley, The National Agriculture Law Center

**9:45 AM**      **The Latest and Greatest in Using Social Media**

- Maureen Michaels

**10:30 AM**     **Coveyou Scenic Farms Renewable Energy and Story**

- David Coveyou, Coveyou Scenic Farm Market

**11:00 AM**     **Session Ends**

### HOOPHOUSE

**WHERE:** Ballroom D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (Comm CORE, Priv CORE)

**CCA CREDITS:** PM (0.5), CM (1.5)

**MODERATOR:** Allison Stawara, Michigan State University Extension

**9:00 AM**      **Hoophouse Soil Health and Fertility**

- Rachel Cross, Spirit of Walloon Market Garden

**9:30 AM**      **Biological Control in Hoophouse Production**

- Elizabeth Buck, Cornell University

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY MORNING

- 10:00 AM Anaerobic Disinfestation**  
• Sally Miller, Ohio State University
- 10:30 AM Water, Weeds & Spacing**  
• Jeremy Moghtader, University of Michigan
- 11:00 AM Session Ends**

### LABOR I

**WHERE:** Grand Gallery C D, DeVos Place

**MODERATOR:** Stan Moore, Michigan State University

- 9:00 AM Federal Legislative Update**  
• Michael Marsh, National Council of Agricultural Employers
- 9:20 AM Rethinking Housing for Agricultural Workers**  
• Marty Miller, Office of Rural and Farmworker Housing (Nonprofit developer)
- 10:10 AM Our Housing Solutions**  
• Richard Raffaelli, Peterson Farms
- 10:40 AM Michigan Agriculture Housing Taskforce**  
• James Averill, MDARD
- 11:00 AM Session Ends**

### LARGE SCALE ORGANIC

**WHERE:** River Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** (presentations as marked)

**CCA CREDITS:** CM (2)

**MODERATOR:** Vicki Morrone, Michigan State University Extension

- 9:00 AM Strategies for Organic Fertility Management**  
• Doug Collins, Washington State University Food Systems Program
- 9:40 AM Perspectives on Large Scale Organic from California**  
• Jeff Mitchell, University of California, Davis
- 10:20 AM Lessons Learned: A Decade of Growing Organic Fruits and Vegetables in the Great Lakes Region**  
• Aaron and Kari Molter, Molter Produce
- 11:00 AM Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY MORNING

### ONION

**WHERE:** Grand Gallery Overlook C D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Bruce Klamer, V & W Farms

**9:00 AM**      **Lessons from NY on Bacterial Bulb Rot and Implementing a Scouting-based Thrips Control Program**

- Ashley Leach, Purdue University

**9:40 AM**      **Nitrogen Fertility Trials in Onions**

- Zack Hayden, Michigan State University Horticulture Department

**10:10 AM**     **Pathogens Causing Bulb Rot in Onion and Stemphylium Update**

- Mary Hausbeck, Michigan State University

**10:40 AM**     **Season-long Weed Control in Onions**

- Bernie Zandstra, Michigan State University Horticulture Department

**11:00 AM**     **Session Ends**

### PEACH AND PLUM

**WHERE:** Grand Gallery Overlook G H, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (1.5)

**MODERATOR:** Kyle Weber, MSHS Board, Watervliet, MI

**9:00 AM**      **Contribution of Cover Sprays to Effective Management of Peach Brown Rot (OH 2B, 0.5 hrs)**

- Dr. Norman Lalancette, Rutgers Agricultural Research & Extension Center

**9:40 AM**      **New Peach Varieties**

- Hemant Gohil, Rutgers University

**10:05 AM**     **Best Practices in Prolonging the Quality of Peaches After Harvest**

- Dr. Jennifer DeEll, OMAFRA

**10:45 AM**     **Peach Hardiness - What we Learned from the Polar Vortex of January 2019**

- Bill Shane, Michigan State University

**11:00 AM**     **Session Ends**

### SWEET CIDER

**WHERE:** Grand Gallery Overlook A B, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (1)

**MODERATOR:** Will Bristol, MSHS Board, Romeo, MI

**9:00 AM**      **Red Fleshed and Other Special Varieties for Sweet Cider**

- Steve van Nocker, Michigan State University

**9:20 AM**      **The Plymouth Orchards and Cider Mill Story**

- Alicia Estrada, Plymouth Orchards and Cider Mill



# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY MORNING

- 9:40 AM**      **New and Emerging Pathogens and Their Potential Impact on Sweet Cider**  
• Les Bourquin, Michigan State University
- 10:10 AM**      **Making Cider Vinegar at Apex Orchards**  
• Tim Smith, Apex Orchards
- 10:40 AM**      **MDARD Update and Cider Mill Inspections for 2019**  
• Mike Lally, MDARD
- 10:55 AM**      **Michigan Cider Makers Guild Update**  
• Bob Tritten, Michigan State University Extension
- 11:00 AM**      **Session Ends**

## TART CHERRY

**WHERE:** Grand Gallery Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Mark Evans, MSHS Board, Frankfurt, MI

- 9:00 AM**      **Impact of Cover Crops on Cherry Orchard Development and Yield**  
• George Bird, Michigan State University
- 9:25 AM**      **Ethephon for Fruit Removal in Tart Cherries**  
• Dr. Todd Einhorn, Michigan State University Department of Horticulture
- 9:50 AM**      **Tart Cherry Disease Update**  
• Dr. George Sundin, Michigan State University - Plant Soil & Microbial Sciences
- 10:20 AM**      **Developing Attract-and-Kill Management Tactics for SWD**  
• Juan Huang, Michigan State University
- 10:45 AM**      **Varietal and Development Susceptibility of Tart Cherry to SWD**  
• Christelle Guedot, University of Wisconsin - Madison
- 11:00 AM**      **Session Ends**

## VINE CROPS

**WHERE:** Grand Gallery E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Ben Phillips, Michigan State University Extension

- 9:00 AM**      **Perishable Agricultural Commodities Act (PACA)**  
• Elizabeth Rumley, The National Agricultural Law Center
- 9:30 AM**      **Seed to Kitchen Collaborative Variety Trials**  
• Julie Dawson, University of Wisconsin-Madison
- 10:00 AM**      **Disease Control Update (OH 2B, 0.5 hrs)**  
• Dan Egel, Purdue University
- 10:30 AM**      **Fertility Management for Squash Yield and Quality**  
• Zack Hayden, Michigan State University Horticulture Department
- 11:00 AM**      **Session Ends**

# GREENHOUSE EXPO EDUCATION PROGRAM

**WEDNESDAY MORNING**

## **Ten Social Media Best Practices to Win More Customers**

**WHERE:** River Overlook A B, DeVos Place

This presentation will provide participants with the best practices to plan business social media marketing strategies. Participants will learn how to develop messages to attract current and new customers, as well as how to schedule and track the return of social media strategies.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Joe Barson

**9:00 AM** • Ariana Torres, Purdue University

**9:50 AM** **SESSION ENDS**

## **The PGR Toolbox I - Selection and Effective Use of Plant Growth Retardants (OH 6D, 0.5 hrs)**

**WHERE:** River Overlook C D, DeVos Place

The plant growth regulator (PGR) toolbox has a wide variety of products to inhibit extension growth of herbaceous ornamentals. Selection of the proper tool depends on your crop and your goals as well as your level of experience. Joyce will cover the basics of the PGRs in the toolbox and how to effectively use them to manage growth during crop production, with an emphasis on herbaceous perennials.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Scott Klooster

**SPONSORED BY:** Fine Americas, Inc

**9:00 AM** • Joyce Latimer, Virginia Tech University

**9:50 AM** **SESSION ENDS**

## **Integrating Pesticides With Biological Control Agents: Can It Be Done? (OH 6D, 0.5 hrs)**

**WHERE:** River Overlook A B, DeVos Place

This presentation will address the controversial issue of using pesticides in conjunction with biological control agents, such as; parasitoids and predators. The presentation will discuss the direct and indirect effects of pesticides (insecticides, miticides, and fungicides) on specific biological control agents along with results from scientific studies conducted under laboratory and greenhouse conditions.

**MI RECERTIFICATION CREDITS:** 1 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** 1 (PM)

**MODERATOR:** Tom Dudek

**SPONSORED BY:** Plant Products

**10:00 AM** • Raymond Cloyd, Kansas State University

**10:50 AM** **SESSION ENDS**

# GREENHOUSE EXPO EDUCATION PROGRAM

## WEDNESDAY MORNING

### Tips for Handling and Propagating Young Plants

**WHERE:** River Overlook C D, DeVos Place

Successful greenhouse crops start with vigorous and healthy young plants. Learn how to properly handle unrooted cuttings from receipt until transplant to reduce losses and propagation time.

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Roberto Lopez, Michigan State University

**SPONSORED BY:** HortAmericas

- 10:00 AM**
- John Dole, North Carolina State University
  - Roberto Lopez, Michigan State University

**10:50 AM**      **SESSION ENDS**

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY AFTERNOON

### PROTECT YOUR ASSETS, PREPARE FOR THE FUTURE - GET MAEAP VERIFIED

**WHERE:** Grand Gallery Overlook A B, DeVos Place

- 1:00 PM**
- Hear from a panel of diverse growers in MI on what MAEAP Verification has done for their operation.
- Dan Busby, Michigan Department of Agriculture and Rural Development

**1:50 PM**      **Session Ends**

### ACRE AGTECH ACCELERATES INNOVATION FOR MICHIGAN AG INDUSTRY

**WHERE:** Grand Gallery Overlook C D, DeVos Place

- 2:00 PM**
- It is often observed the agricultural industry seems slow to adopt technology. ACRE was told on numerous occasions those with innovations did not ask those in the industry what was wanted, hence slow adoption.

ACRE is working to overcome this situation, we start our exploration for innovations by asking the ag community. ACRE will be introducing startup companies bringing new ideas to serve the agriculture industry in Michigan. The founders will be pitching their companies to agri-business leaders and investors during this session. All of these companies have innovations that can have a rapid impact and be adopted easily.

- Doug Huesdash, ACRE AgTech

**2:50 PM**      **Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY AFTERNOON

### APPLE II

**WHERE:** Ballroom D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1 (presentations as marked)

**CCA CREDITS:** PM (1), CM (1)

**MODERATOR:** Chris Kropf, MSHS Board, Lowell, MI

**2:00 PM Apple Fruit Rots**

- Dr. Norman Lalancette, Rutgers Agricultural Research & Extension Center

**2:30 PM Fire Blight: Information on all Available Control Materials (OH 2B, 0.5 hrs)**

- Dr. George Sundin, Michigan State University - Plant Soil & Microbial Sciences

**3:00 PM Nutrient Uptake and Distribution in Apple**

- Dr. Lee Kalcits, Washington State University

**3:30 PM 2019 Apple Thinning Summary (OH 2B, 0.5 hrs)**

- Dr. Todd Einhorn, Michigan State University Department of Horticulture

**4:00 PM Session Ends**

### BLUEBERRY II

**WHERE:** Grand Gallery A B, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1C, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (0.5)

**MODERATOR:** Steve Hunt, MSHS Board, Grand Junction, MI

**2:00 PM Where Does the Michigan Blueberry Industry go From Here?**

- Mark Longstroth, Michigan State University Extension

**2:30 PM Managing the 'Spotted Weapon of Destruction' (SWD) in Michigan Blueberries (OH 2B, 0.5 hrs)**

- Rufus Isaacs, Michigan State University (Department of Entomology)

**3:00 PM Machine Harvesting Blueberries for the Fresh Market in Washington**

- Lisa DeVetter, Washington State University Northwestern Washington Research and Extension Center

**3:20 PM Blueberry Weed Control**

- Bernie Zandstra, Michigan State University Horticulture Department

**3:40 PM The Michigan Blueberry Commission**

- Kevin Robson, Michigan Blueberry Commission

**4:00 PM Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY AFTERNOON

### CELERY

**WHERE:** Grand Gallery Overlook A B, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1B, Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1 (presentations as marked)

**CCA CREDITS:** PM (1.5), CM (0.5)

**MODERATOR:** Mark Clossen

**2:00 PM Postharvest Management of Celery**

- Trevor Suslow, Produce Marketing Association

**2:30 PM Carrot Weevil Biology and Control (OH 2B, 0.5 hrs)**

- Elizabeth Long, Purdue University

**3:00 PM Celery Pathology Update (OH 2B, 0.5 hrs)**

- Mary Hausbeck, Michigan State University

**3:30 PM Suitability of Oilseed Radish Varieties and Other Cover Crops as Hosts for Plant Parasitic Nematodes**

- Marisol Quintanilla-Tornel, Michigan State University
- Sita Thapa, Michigan State University

**4:00 PM Session Ends**

### CUT FLOWERS

**WHERE:** River Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 1 (presentations as marked)

**CCA CREDITS:** PM (0.5), CM (1.5)

**MODERATOR:** Marissa Schuh, Michigan State University Extension

**2:00 PM Pushing the Easy Button: Cut Flower Varieties and Helpful Tips for Aspiring Flower Farmers**

- Kristiana Coutu, Farmer's Bloom Flower Company

**2:30 PM Weed Control Options in Cut Flowers (OH 6D, 0.5 hrs)**

- Andrew Senesac, Cornell Cooperative Extension

**3:00 PM Pest Management in Transplant Houses (OH 6D, 0.5 hrs)**

- Dave Smitley, Michigan State University

**3:30 PM Postharvest Handling of Cut Flowers**

- John Dole, North Carolina State University

**4:00 PM Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

WEDNESDAY AFTERNOON

## FARM MARKETING IV

WHERE: Ballroom A, DeVos Place

MODERATOR: Joanne Davidhizer, Michigan State University Extension

2:00 PM **Pizza on the Farm**

- Heather Secrist, Suncrest Gardens Farm

2:30 PM **Packaging That Sells: Insights, Trends and Options**

- Greg Clarke, MJS Packaging
- Cindy Vogel, MJS Packaging

3:20 PM **Local Zoning and Agritourism - How do They Intersect**

- Matthew Kapp, Michigan Farm Bureau
- Rusty Rumley, The National Agriculture Law Center
- Janice Benson, MATA
- Jae Gerhart, Michigan State University Extension
- Garrett Ziegler, Michigan State University Extension
- Harmony Gmazel, Michigan State University Extension
- Mary Reilly, Michigan State University Extension

4:00 PM **Session Ends**

## LABOR II

WHERE: Grand Gallery C D, DeVos Place

MODERATOR: Stan Moore, Michigan State University

2:00 PM **Introductions and greetings from NCAE**

- Michael Marsh, National Council of Agricultural Employers

2:05 PM **Application Processing Trends and Proposed Rule Changes**

- Liam Stein, U.S. Department of Labor - Office of Foreign Labor Certification

3:05 PM **CLFCA's Impact on the Agricultural Labor Landscape in California**

- Guadalupe Sandoval, California Farm Labor Contractors Association

4:00 PM **Session Ends**

## SOIL HEALTH

WHERE: Grand Gallery E F, DeVos Place

MI RECERTIFICATION CREDITS: 2 (Comm CORE, Priv CORE)

CCA CREDITS: CM (2)

MODERATOR: Vicki Morrone, Michigan State University Extension

2:00 PM **Optimizing Plant-microbial Processes to Promote Soil Health**

- Laurie Drinkwater, Cornell University

2:30 PM **Long Term Effects of Tillage and Cover Crops on Vegetables**

- Dan Brainard, Michigan State University Horticulture Department

3:00 PM **Organic Reduced Tillage in the Pacific Northwest**

- Doug Collins, Washington State University Food Systems Program

# GREAT LAKES EXPO EDUCATION PROGRAM

## WEDNESDAY AFTERNOON

**3:30 PM**      **Cover Crop Variety Testing in Michigan**

• Kim Cassida, Michigan State University

**4:00 PM**      **Session Ends**

## SWEET CHERRY

**WHERE:** Grand Gallery Overlook E F, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (2)

**MODERATOR:** Isaiah Wunsch

**2:00 PM**      **Observations of SWD Populations Related to 2019 Weather**

• Dr. Julianna Wilson, Michigan State University Department of Entomology

**2:20 PM**      **SWD Management in Sweet Cherries**

• Sarah Dietrich, Michigan State University

**2:40 PM**      **Exploring Mating Disruption for San Jose Scale in Sweet Cherries**

• Emily Pochubay, Michigan State University

**3:00 PM**      **Sap Beetle Biology, Management, and Observations from 2019**

• Nikki Rothwell, Michigan State University Extension

**3:20 PM**      **Reviewing Sweet Cherry Disease Challenges and Preparing for 2020**

• Dr. George Sundin, Michigan State University - Plant Soil & Microbial Sciences

**4:00 PM**      **Session Ends**

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# GREENHOUSE EXPO EDUCATION PROGRAM

**WEDNESDAY AFTERNOON**

## **Online Retail Marketing: Seven Approaches to Boost Sales**

**WHERE:** River Overlook A B, DeVos Place

Successful greenhouse crops start with vigorous and healthy young plants. Learn how to properly handle unrooted cuttings from receipt until transplant to reduce losses and propagation time.

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Michelle Hunt-Ruggle

**SPONSORED BY:** Michigan Farm Bureau

**2:00 PM** • Ariana Torres, Purdue University

**2:50 PM** **SESSION ENDS**

## **The PGR Toolbox II – Using PGRs to Enhance Growth and Quality of Herbaceous Perennials (OH 6D, 0.5 hrs)**

**WHERE:** River Overlook C D, DeVos Place

The plant growth regulator (PGR) Toolbox includes products that can actually improve plant growth and habit. Joyce will cover her work on using PGRs to improve branching and growth management to produce high quality herbaceous perennial plants.

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**OH RECERTIFICATION CREDITS:** 0.5 (presentations as marked)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Garrett Owen, Michigan State University

**SPONSORED BY:** Fine Americas, Inc

**2:00 PM** • Joyce Latimer, Virginia Tech University

**2:50 PM** **SESSION ENDS**

## **It's Coming Out of the No\$\$le**

**WHERE:** River Overlook A B, DeVos Place

When to water (or not) is one of the key ways to improve quality and reduce shrink. Your biggest challenge is finding a way to teach your team to make the correct watering decision. Will has developed some easy-to-implement techniques to help you train your team to improve their watering decision making.

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Erik Runkle, Michigan State University

**SPONSORED BY:** Ball Horticultural Co.

**3:00 PM** • Will Healy, Ball Horticulture

**3:50 PM** **SESSION ENDS**



# GREENHOUSE EXPO EDUCATION PROGRAM

## WEDNESDAY AFTERNOON

### Best Performing Annuals and Perennials

**WHERE:** River Overlook C D, DeVos Place

Each year, hundreds of cultivars of flowering annuals and herbaceous perennials are trialed and displayed by participants of the Michigan Garden Plant Tour. Daedre will present the “best of the best” of the MSU Trial Garden in 2019. Heidi will present highlights from the other four tour sites: Four Star Greenhouse, Mast Young Plants, Raker-Roberta’s Young Plants, and Walters Gardens.

**MI RECERTIFICATION CREDITS:** 1 (Comm CORE, Priv CORE)

**CCA CREDITS:** 1 (CM)

**MODERATOR:** Brian Weesies

**SPONSORED BY:** Michigan Greenhouse Growers Council

**3:00 PM**      • Heidi Lindberg, Michigan State University Extension  
                    • Daedre McGrath, Michigan State University

**3:50 PM**      **SESSION ENDS**

**THANK YOU**  
**to the**  
**Sponsors**  
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**Greenhouse**  
**Growers Expo**

# GREAT LAKES EXPO EDUCATION PROGRAM

THURSDAY MORNING

## BEGINNING ORGANIC PRODUCTION

WHERE: Grand Gallery Overlook E, DeVos Place

MODERATOR: Vicki Morrone, Michigan State University CSUS

- 9:00 AM **Evaluating Your Needs to Farm Organically**  
• Jeff Mitchell, University of California, Davis
- 9:45 AM **Smart Weed Management for Organic Production**  
• Dan Brainard, Michigan State University Horticulture Department
- 10:15 AM **To Certify or Not - That is the Question.**  
• Vicki Morrone, Michigan State University CSUS
- 11:00 AM **Panel of Organic Producing Farmers**
- 12:00 PM **Session Ends**

## CHESTNUTS

WHERE: Grand Gallery Overlook C, DeVos Place

MI RECERTIFICATION CREDITS: 1 (Comm CORE, Priv CORE)

CCA CREDITS: CM (1)

MODERATOR: Erin Lizotte, Michigan State University

- 9:00 AM **Chestnuts 101**  
• Erin Lizotte, Michigan State University
- 9:10 AM **Orchard Establishment and Care**  
• Mario Mandujano, Michigan State University
- 9:40 AM **Cost of Production**  
• Erin Lizotte, Michigan State University
- 9:55 AM **Harvest and Postharvest Care**  
• Dan Guyer, Michigan State University
- 10:15 AM **Market Considerations**  
• Roger Blackwell, Chestnut Growers Inc.
- 10:30 AM **Open Q and A**
- 11:00 AM **Session Ends**

## FARM MARKETING WORKSHOP

WHERE: Ballroom A, DeVos Place

MODERATOR: Bob Tritten, Michigan State University Extension

- 9:00 AM **Donut Excellence for the Beginner and the Pro**  
• Andy Barret, Barret Donut Mixes
- 11:00 AM **Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## THURSDAY MORNING

### HARD CIDER

**WHERE:** Grand Gallery Overlook A, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** PM (0.5), CM (0.5)

**MODERATOR:** Beth Hubbard, MSHS Board, Three Rivers, MI

**9:00 AM Cider Varieties and Red Flesh Breeding Program**

- Christopher Gottschalk, Michigan State University

**9:30 AM Growing and Marketing Cider Varieties Profitably**

- Tim Smith, Apex Orchards

**10:00 AM Pest and Disease Susceptibility of Cider Apple Varieties**

- Dr. George Sundin, Michigan State University - Plant Soil & Microbial Sciences

**10:30 AM An Update on Michigan Liquor Control Changes**

- David Marvin, Michigan Liquor Control Commission

**11:00 AM Session Ends**

### MDARD GRANTS

**WHERE:** Grand Gallery Overlook B, DeVos Place

**9:00 AM Federal Grant Programs – SCBG**

- Heather Throne, MDARD
- Amy Bearss, MDARD

**10:00 AM USDA Rural Development Loans and Grants**

- Bobbie Morrison, USDA
- Lisa Epple, USDA

**11:00 AM Session Ends**

### ORGANIC OPPORTUNITIES

**WHERE:** Grand Gallery Overlook D, DeVos Place

**MODERATOR:** John Biernbaum, Michigan State University

**9:00 AM Aggressively Investing in a Vision at Bear Creek Farm**

- Anne Bates, Bear Creek Organic Farm
- Brian Bates, Bear Creek Organic Farm

**10:00 AM Addressing Diverse Organic Community Priorities at Nature and Nurture**

- Mike Levine, Nature and Nurture Seeds
- Erica Kempter, Nature and Nurture Seeds

**11:00 AM Session Ends**

# GREAT LAKES EXPO EDUCATION PROGRAM

## THURSDAY MORNING

### TREE FRUIT ROOTSTOCKS

**WHERE:** Ballroom D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (1C, Comm CORE, Priv CORE)

**CCA CREDITS:** CM (2)

**MODERATOR:** Amy Irish Brown, Michigan State University

**9:00 AM Cherry Rootstocks**

- Dr. Amy Iezzoni, Michigan State University Department of Horticulture
- Gregory Lang, Michigan State University Horticulture Department

**9:20 AM Peach and Other Stone Fruit Rootstocks**

- Bill Shane, Michigan State University

**9:40 AM Apple Rootstocks**

- Philip Schwallier, Michigan State University Extension
- Dr. Todd Einhorn, Michigan State University Department of Horticulture

**10:00 AM Pear Rootstocks**

- Dr. Todd Einhorn, Michigan State University Department of Horticulture

**10:20 AM Replant Considerations**

- Dr. Julianna Wilson, Michigan State University Department of Entomology

**10:30 AM Discussion**

**11:00 AM Session Ends**

**THANK YOU**  
**to our**  
**Thursday**  
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# GREAT LAKES EXPO EDUCATION PROGRAM

THURSDAY AFTERNOON

## ORGANIC FRUIT

**WHERE:** Grand Gallery Overlook E, DeVos Place

**MI RECERTIFICATION CREDITS:** 1 (1C, Comm CORE, Priv CORE)

**MODERATOR:** Matt Grieshop, Michigan State University

- 1:00 PM Biochar and Co-composted Biochar in Strawberries and Potatoes**  
• Doug Collins, Washington State University Food Systems Program
- 2:00 PM Panel Discussion: Identifying Research Needs for Michigan Organic Tree Fruit Production Systems**
- 3:00 PM Session Ends**

## ORGANIC VEGETABLE PRODUCTION

**WHERE:** Grand Gallery Overlook D, DeVos Place

**MI RECERTIFICATION CREDITS:** 2 (Comm CORE, Priv CORE)

**CCA CREDITS:** CM (2)

**MODERATOR:** Vicki Morrone, Michigan State University CSUS

- 1:00 PM Gearing up your Production for the Next Level of Production**  
• Jeff Mitchell, University of California, Davis
- 1:45 PM Reducing Risk to Soil Born Pests - Like Nematodes**  
• Marisol Quintanilla-Tornel, Michigan State University  
• Emilie Cole, Michigan State University
- 2:30 PM Problem Solving and Innovation on the Farm: How Expert Farmer Innovators Integrate Experimentation with Managing Their Farm**  
• Laurie Drinkwater, Cornell University
- 3:30 PM Taste of Michigan with discussion**  
• Vicki Morrone, Michigan State University CSUS
- 4:00 PM Session Ends**

# SECURING YOUR LEGACY - TOMORROW'S SUCCESS DEPENDS ON TODAY'S DECISIONS

**THURSDAY MORNING**

**WHERE:** Grand Gallery A B, DeVos Place

**MODERATOR:** Florencia Colella, Michigan State University Extension

**9:30 AM      The Lean Farm: How to Minimize Waste, Increase Efficiency, and Maximize Value and Profits on Your Farm**

• Ben Hartman, Clay Bottom Farms

**11:30 Am      Session Ends**

## **FARM SUCCESSION**

**WHERE:** Grand Gallery E F, DeVos Place

**MODERATOR:** Dr. Ron Goldy, Michigan State University Extension

**9:30 AM      Keeping it in the Family**

• Paige Pratt, Pratt Cattle Company

**10:30 AM      What to Consider When Estate Planning**

• Rusty Rumley, The National Agriculture Law Center

**11:30 AM      Session Ends**

## **GENERAL I**

**WHERE:** Grand Gallery C D, DeVos Place

**MODERATOR:** Ben Phillips, Michigan State University Extension

**9:30 AM      Hiring and Keeping Great Seasonal Retail Staff**

• Ruth Ann Roney, Tuttle Orchards

**10:30 AM      Adding Value to What You Already Produce**

• Dr. Bill Knudson, Michigan State University Product Center

**11:30 AM      Session Ends**

# SECURING YOUR LEGACY - TOMORROW'S SUCCESS DEPENDS ON TODAY'S DECISIONS

**THURSDAY AFTERNOON**

## **FARM EFFICIENCY**

**WHERE:** Grand Gallery A B, DeVos Place

**MODERATOR:** Eric Karbowski, Michigan State University Extension

**1:00 PM      The Lean Farm: How to Minimize Waste, Increase Efficiency, and Maximize Value and Profits on Your Farm**

- Ben Hartman, Clay Bottom Farms

**3:00 PM      Session Ends**

## **FARM SUCCESSION**

**WHERE:** Grand Gallery E F, DeVos Place

**MODERATOR:** Dr. Ron Goldy, Michigan State University Extension

**1:00 PM      Keeping it in the Family**

- Paige Pratt, Pratt Cattle Company

**2:00 PM      What to Consider When Estate Planning**

- Rusty Rumley, The National Agriculture Law Center

**3:00 PM      Session Ends**

## **GENERAL II**

**WHERE:** Grand Gallery C D, DeVos Place

**MODERATOR:** Marissa Schuh, Michigan State University Extension

**1:00 PM      Uncovering the Drivers of Profitability on your Farm**

- Cindy Birchmeier, GreenStone Farm Credit Services

**2:00 PM      Coping With the Impact From Beginning to End of Farm Stress**

- Bill Grabemeyer, Grabemeyer Farms
- Stacey Rocklin, Institute of Agricultural Technology
- Mike Radom

**3:00 PM      Session Ends**

## **KEYNOTE - TED MATTHEWS**

**WHERE:** Grand Gallery A B, DeVos Place

**3:15 PM      Recognizing Farm Stress and Steps to Take**

- Ted Matthews, Minnesota Rural Mental Health

**4:15 PM      Session Ends**

## EDUCATION PROGRAM COORDINATORS

### DANIEL BRAINARD

Horticulture Dept.,MSU

### RON GOLDY

Senior Vegetable Educator,  
MSU Extension, Benton Harbor, MI

### GREG LANG

Horticulture Dept., MSU

### HEIDI LINDBERG

Extension Educator  
MSU Extension, West Olive, MI

### ERIK RUNKLE

Horticulture Dept., MSU

### BOB TRITTEN

District Fruit Educator,  
MSU Extension, Flint, MI

## EDUCATION SESSION COORDINATORS

### JOHN BIERNBAUM

Michigan State University Horticulture  
Department

- **Organic Opportunities**

### CARLOS GARCIA

Michigan State University Extension

- **Berries**

### RON GOLDY

Michigan State University Extension

- **Securing Your Legacy - Tomorrow's Success Depends on Today's Decisions, Tomato/Pepper/Eggplant, Greenhouse Vegetable Production, Farm Market**

### MATT GRIESHOP

Michigan State University

- **Organic Fruit Production**

### ZACK HAYDEN

Michigan State University Horticulture  
Department

- **Large-scale Organic, Soil Health**

### KATIE HEFLICK

Michigan State University Student Organic  
Farm

- **Hoop House**

### AMY IRISH-BROWN

Michigan State University Extension

- **Apple I, Apple II, Tree Fruit**

### DAVID JONES

Michigan State University Extension

- **Peach and Plum**

### HEIDI LINDBERG

Michigan State University Extension

- **Greenhouse**

### ERIN LIZOTTE

Michigan State University

- **Chestnuts**

### STAN MOORE

Michigan State University Extension

- **Labor I, Labor II**

### VICKI MORRONE

Michigan State University CSUS

- **Beginning Organic Production, Organic Vegetable Production**

### BEN PHILLIPS

Michigan State University Extension

- **Vine Crops, Carrots, Cut Flowers**

### EMILY POCHUBAY

Michigan State University Extension

- **Tart Cherry, Sweet Cherry, Hard Cider**

### NIKKI ROTHWELL

Michigan State University Extension

- **Tart Cherry, Sweet Cherry, Hard Cider**

### ERIK RUNKLE

Michigan State University Horticulture  
Department

- **Greenhouse**

### MARISSA SCHUH

Michigan State University Extension

- **Sweet Corn, Cut Flowers**

### PHIL SCHWALLIER

Michigan State University Extension

- **Apple I, Apple II**

### MONICA JEAN

Michigan State University Extension

- **Potato**



## EDUCATION SESSION COORDINATORS

### **ANDREA STAY**

- MDARD
- MAEAP

### **PHIL TOCCO**

- Michigan State University Extension
- Food Safety, Vine Crops

### **THOMAS TODARO**

- Michigan State University Extension
- Grapes

### **BOB TRITTEN**

- Michigan State University Extension
- Sweet Cider, Farm Market

### **BEN WERLING**

- Michigan State University Extension
- Asparagus, Onion, Carrot, Celery

### **JULIANNA WILSON**

- Michigan State University
- Tree Fruit

### **BERNIE ZANDSTRA**

- Michigan State University Horticulture Department
- Pickling Cucumber

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Heidi Lindberg – Michigan State  
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**Executive Director**

Geoff Hansen – Mainstreet Consulting, LLC

# MSHS TRUST FUND/MVC FUND

## SUPPORTING FRUIT AND VEGETABLE RESEARCH AND EXTENSION

The Michigan State Horticultural Society and the Michigan Vegetable Council have committed substantial funding over the years to support research and Extension beneficial to fruit and vegetable growers. This support has become increasingly important as state and federal budgets for agricultural research and Extension have tightened. To help meet the needs for funding, both organizations have established funds to generate income to support fruit and vegetable research and Extension in the years ahead.

## MICHIGAN STATE HORTICULTURAL SOCIETY TRUST FUND

The Michigan State Horticultural Society (MSHS) Trust Fund was established in 1983. It is a perpetual trust fund. The fund's purpose is to support horticultural research, extension and educational projects. The fund has been well supported since its inception by gifts from growers and others involved in Michigan's fruit industry. The income generated by the fund has significantly contributed to research and Extension work beneficial to fruit growers in Michigan. Gifts to the fund are tax deductible on federal income tax returns. To encourage gifts to the fund, the Michigan State Horticultural Society is contributing two dollars for each dollar given to the fund through December 31 of this year. For more information on the fund, you can visit the Michigan State Horticultural Society's booth in the trade show.

**Trade Show Booth in Grand Gallery**

## MSHS TRUST FUND COMMITTEE

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Ed Robinette

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Steve Hunt

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Allyn Anthony

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Ben Smith

## MICHIGAN VEGETABLE COUNCIL FUND

The Michigan Vegetable Council (MVC) Fund was established in 2003 to support research and education programs that benefit Michigan vegetable growers. It is an endowed fund and is part of the endowed funds managed by the Fremont Area Community Foundation, which is one of the largest community foundations in the country. Gifts to the fund are tax deductible on federal income tax returns. The first grants were made from the MVC Fund in 2008. To help grow the fund, the Michigan Vegetable Council has matched all gifts received from individuals and businesses. In addition, the Fremont Area Community Foundation matches memorial gifts up to \$500 per donor per year. For more information on the fund, you can visit the Michigan Vegetable Council's booth in the trade show.

**Trade Show Booth Number 951**

# TRADE SHOW PRODUCT CATEGORIES

- A** = C.A. & Refrigeration Equipment
- B** = Crop Protection & Post Harvest
- C** = Fertilizers & Plant Foods
- D** = Farm Equipment & Crop Protection Equipment
- E** = Farm Market Products & Equipment, Entertainment Farming
- F** = Packing House Equipment
- G** = Packaging
- H** = Greenhouse & Supplies
- I** = Growing Mediums
- J** = Harvesting/Picking
- K** = Irrigation
- L** = Nursery Stock & Rootstocks
- M** = Orchard Management, Supplies & Software
- N** = Organic Related
- O** = Blueberry Related
- P** = Plants
- Q** = Seeds
- R** = Pollination
- S** = Pruning & Vineyard Equipment
- T** = Financial Services and Insurances
- U** = Government, College Depts. & Non-Profits
- V** = Others

# TRADE SHOW BOOTH LOCATIONS

**Farm Market and More Exhibit Hall:** Booth numbers 1-97

**Main Exhibit Hall:** Booth numbers E1-E18, 99-1551

# TRADE SHOW EXHIBITORS

AS OF NOV. 15, 2019

A & B Packing Equipment, Inc., <b>E,F,J</b> .....	832-837 & 916-921 & 927-931 & 1022-1026
A & L Great Lakes Labs.....	510
A & L Labs Canada.....	646
A.M. Leonard Inc. ....	748
A.M.A. Horticulture Inc., <b>H,O,P</b> .....	1047
A1 Mist Sprayers, <b>D,U</b> .....	320-321
Acadian Plant Health.....	1206
Ackerman, George F. Company, <b>D,K,L</b> .....	632-633 & 720-721
ACRE AgTech.....	1544-1545
Action Mold & Machining.....	914
ADAMA, <b>B</b> .....	547
Adams County Nursery, <b>M</b> .....	244-245
Adams Fertilizer Equip., <b>C,D,U</b> .....	1027B & 1126B
ADM,.....	1444
Advancing Alternatives, <b>H</b> .....	1441-1442
Advantage Label & Packaging, <b>E,G,H</b> .....	1305-1306
Aerobotics.....	1506
Ag Nutrition LLC.....	509
Ag-Liner Inc., <b>D,H,Q</b> .....	1140
Agri Energy Resources, <b>C,E,N</b> .....	1101
AgroFresh, <b>A,B,J</b> .....	352-353
Agro-K Corporation.....	1104
AgroLiquid.....	1252-1253 & 1300-1301
AgroSource Inc., <b>B</b> .....	1150
AgSafe, <b>W,X</b> .....	56
AgTec Sprayers.....	126-129 & 211-214
AIM4G, LLC, <b>C,O,P</b> .....	449
Airtec Sprayers, Inc. ....	448
Al - Par Peat.....	1102-1103
Albuna Plant Farm.....	1337
All America Selection.....	64
Alliance Analytical Laboratories, <b>X</b> .....	1108
Alltech Crop Science.....	907
All-Weather Seal of W. MI, <b>X</b> .....	1551
Alta Equipment Company.....	627-628 & 725-726
American Fruit Grower.....	650
American Nettings & Fabric.....	1352
American Price Mark.....	1302
American Takii Inc.....	545-546
American Vegetable Grower.....	649
Ameritrellis, <b>N,O,P,Q</b> .....	1542
Amiad USA.....	305
Amish Country Popcorn, <b>E,X</b> .....	61
Anderson Chemical, <b>B,L,P</b> .....	1207
Argent Tape and Label.....	306
Arlene Resource Management.....	1247-1249
Armando Alvarez Group, <b>E,H,X</b> .....	1245
A-ROO Company LLC, <b>G,H,V</b> .....	1050
ASA- Lift.....	1124
ATAGO USA.....	1304
Autrusa, <b>D</b> .....	1120-1121

Avalon Building Concepts	913
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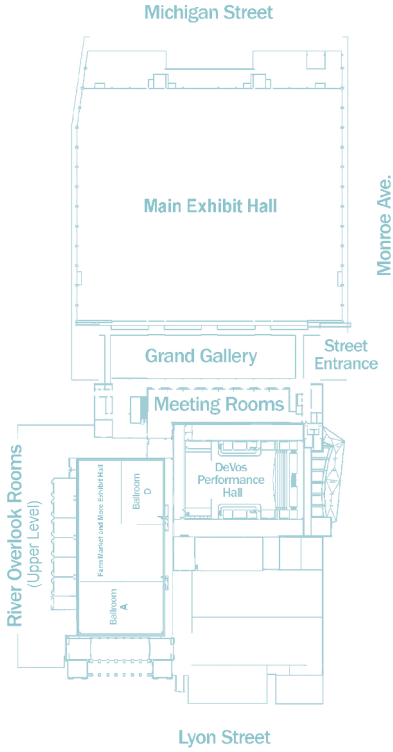
Tuesday, December 10, 4:00 PM - 5:30 PM

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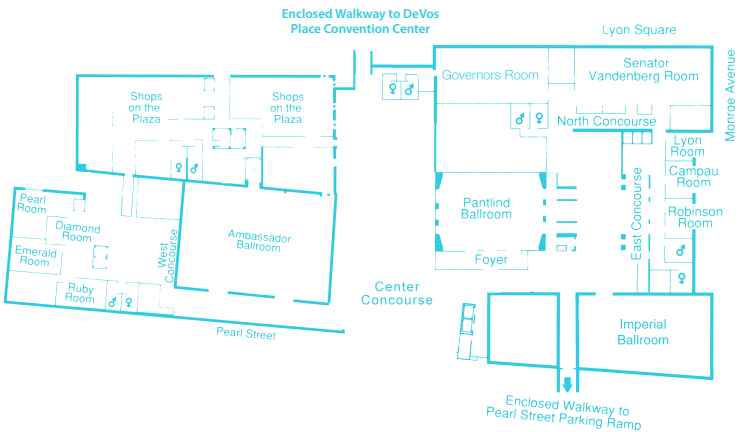
Exhibit Hall, DeVos Place

Please join us in the back of the exhibit hall Tuesday and Wednesday for a reception with the exhibitors. Cash bar and light refreshments will be offered.

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