

Project ICP Presentations, Nov. 15-19, 2015, Minneapolis, MN
Entomological Society of America Annual Meeting
<http://entsoc.org/entomology2015>

Pollinator Talks related to the ICP Project (p. 1-2)

Sunday, Nov 15, 2015

8:54 AM **Developing strategies to manage the alternative pollinator, *Osmia cornifrons*, in Michigan cherry orchards.**

Nikki Rothwell, Michigan State University

200 A (Convention Center)

9:16 AM **The influence of floral enhancements on the reproduction of *Osmia lignaria* in almond orchards.**

Derek R. Artz and Theresa L. Pitts-Singer, USDA - ARS, Logan, UT

200 A (Convention Center)

11:10 AM **An integrated crop pollination strategy for almond.**

Theresa L. Pitts-Singer and Derek R. Artz, USDA - ARS, Logan, UT

205 A (Convention Center)

Monday, Nov 16, 2015

5:30 PM **Poster D3073: **Pollinators, pumpkins and primers, oh my! A preliminary exploration of wild *Bombus impatiens* population trends in Pennsylvania.****

R. Carley Miller, Pennsylvania State University; Anna Devin Taylor, Univ. of West Alabama; Shelby J. Fleischer, Pennsylvania State University; James Strange, USDA-ARS, Logan, UT; and Amber D. Tripodi, Pennsylvania State University

Exhibit Hall BC (Convention Center)

6:30 PM **Poster D3074: **Foraging activity and pollination by managed colonies of *Bombus impatiens* (Hymenoptera: Apidae) in highbush blueberry, *Vaccinium corymbosum*.****

Knute Gundersen, Jason Gibbs, Cecily Kowitz, Katherine Odanaka, Gabriela Quinlan and Rufus Isaacs, Michigan State University

Exhibit Hall BC (Convention Center)

Tuesday, Nov 17, 2015

3:25 PM **Implications of small and large scale land conversion for bee communities and pollination.**

Rufus Isaacs, Michigan State University

211 D (Convention Center)

4:25 PM **Knowledge networks for managing ecosystem services in agroecosystems.**

Kelly Garbach, Loyola University of Chicago

Auditorium 1 (Convention Center)

Wednesday, Nov 18, 2015

8:30 AM **Local, landscape and regional effects on pollinator diversity and yield of highbush blueberry**

Jason Gibbs, Michigan State University; Kyle Bobiwash, Simon Fraser University; Tiia Haapalainen, Simon Fraser University; Elizabeth Elle, Simon Fraser University; Cory Stanley-Stahr, University of Florida; James D. Ellis, University of Florida; George Hoffmann, Oregon State University; Sujaya Rao, Oregon State University; Rufus Isaacs, Michigan State University.

200 E (Convention Center)

8:55 AM **Getting from pollinator visitation to yield: A synthesis across multiple crop types.**

James Reilly and Rachael Winfree, Rutgers, The State Univ. of New Jersey

200 E (Convention Center)

9:02 AM **Pollination deficits in Bluecrop and Draper blueberries, *Vaccinium corymbosum*, in the Willamette Valley, Oregon.**

George Hoffman and Sujaya Rao, Oregon State University

200 J (Convention Center)

3:53 PM **Working with growers to enhance crop pollination using wildflower plantings.**

Neal Williams and Kimiora Ward, Univ. of California, Davis

200 D (Convention Center)

Other Pollinator Talks by ICP Project Partners and Advisors (p. 3-7)

Sunday, Nov 15, 2015

- 8:10 AM** ***Developing alternative manageable bee species for crop pollination.***
Corey Andrikopoulos¹, James H. Cane² and Diane G. Alston¹. 1 Utah State Univ.; 2 USDA -ARS, Logan, UT
200 A (Convention Center)
- 8:38 AM** **Impact of nest manipulation on the developmental stages of an orchard pollinator.**
Neelendra K. Joshi and David J. Biddinger, Pennsylvania State Univ.
200 I (Convention Center)
- 9:52 AM** **Forage and nutrition in agricultural lands for honey bee colonies in the northern Great Plains region of the US.**
Matthew Smart¹, Marla Spivak² and Clint Otto¹, 1 U.S. Geological Survey, Jamestown, ND, 2 Univ. of Minnesota
208 AB (Convention Center)
- 10:02 AM** **Modifying IPM programs to integrate pollinator health: A case study of rosy apple aphid management in apple orchards.**
David J. Biddinger and Neelendra K. Joshi, Pennsylvania State Univ.
205 CD (Convention Center)
- 10:20 AM** **Roadsides and butterflies: Problematic or valuable habitat?**
Jennifer L. Hopwood, Univ. of Kansas and Xerces Society for Invertebrate Conservation
209 AB (Convention Center)
- 10:32 AM** **Pesticide exposure risks for blue orchard bees in managed systems.**
Andi Kopit^{1,2}, Theresa L. Pitts-Singer², Ricardo Ramirez³, John J. Adamczyk³, and Blair Sampson³. 1 Utah State Univ.; 2 USDA - ARS, Logan, UT; 3 USDA - ARS, Poplarville, MS.
200 A (Convention Center)
- 11:12 AM** **Tech-transfer teams: Working for beekeepers.**
Katie Lee and Marla Spivak, Univ. of Minnesota
208 AB (Convention Center)
- 11:36 AM** **A regional assessment of eastern apple grower knowledge, perceptions, and attitudes of alternative pollinators.**

Mia Park^{1,2}, Neelendra K. Joshi³, Edwin Rajotte³, David J. Biddinger³, John Losey² and Bryan N. Danforth². 1 Univ. of North Dakota; 2 Cornell Univ.; 3 Pennsylvania State Univ.

200 I (Convention Center)

Monday, Nov 16, 2015

9:03 AM Neonicotinoid impacts on pollinators in apple orchards.

Sarah Shugrue, Edwin Rajotte, Neelendra K. Joshi, and David J. Biddinger, Pennsylvania State Univ.

200 E (Convention Center)

9:51 AM Effects of *Nosema bombi* and Captan on lab-reared colonies of *Bombus vosnesenskii* (Hymenoptera: Apidae).

Houston Judd¹, Ricardo Ramirez¹, and James Strange². 1 Utah State Univ.; 2 USDA - ARS, Logan, UT.

211 A (Convention Center)

11:36 AM Do honey bees, *Apis mellifera*, and wild bees (Apoidea) respond differently to pollinator friendly habitat?

Elaine Evans¹, Matthew Smart² and Marla Spivak¹, 1 Univ. of Minnesota, 2 USGS, Jamestown, ND

204 AB (Convention Center)

12:00 PM Massive bee mortality associated with linden trees: Bee diversity and susceptibility to nectar sugars.

Adriana Argoti and Sujaya Rao, Oregon State Univ.

204 AB (Convention Center)

6:30 PM Poster D3276: Routes of alfalfa leafcutting bee exposure to an insect growth regulator under field conditions.

Theresa L. Pitts-Singer, USDA-ARS, Logan UT; James Barbour, University of Idaho

Exhibit Hall BC (Convention Center)

Tuesday, Nov 17, 2015

8:30 AM The wondrous habits of ground-nesting bees: Ubiquitous, diverse, but inscrutable.

James H. Cane (jim.cane@ars.usda.gov), USDA - ARS, Logan, UT

M100 D (Convention Center)

- 9:00 AM** **Mason bees: The union between pollination and soils.**
Dave Hunter, Crown Bees
M100 D (Convention Center)
- 9:30 AM** **The effect of soil disturbance on a ground nesting bee.**
Katharina Ullmann, Xerces Society for Invertebrate Conservation
M100 D (Convention Center)
- 10:00 AM** **Bumble bee colony performance increases with local or landscape resource availability, but not both.**
Brian Spiesman¹, Claudio Gratton¹ and Rufus Isaacs². 1 Univ. of Wisconsin, Madison; 2 Michigan State Univ.
101 H (Convention Center)
- 11:25 AM** **Antimicrobial compounds from plants to the hive: Benefits of a propolis envelope to honey bee immunity and colony health.**
Renata Borba and Marla Spivak, Univ. of Minnesota
204 AB (Convention Center)
- 1:30 PM** **Ground-nesting by bees: A review of our limited understanding of a common and diverse habit.**
James H. Cane, USDA - ARS, Logan, UT
200 D (Convention Center)
- 1:50 PM** **Factors associated with nesting: Are we measuring the right things?**
Hillary Sardinas (hsardinas@berkeley.edu) and Claire Kremen, Univ. of California, Berkeley, CA
200 D (Convention Center)
- 2:00 PM** **Interactions between pollination and pest control services in agroecosystems.**
Ola Lundin, Univ. of California, Davis, CA
Auditorium 1 (Convention Center)
- 2:05 PM** **Conserving and enhancing wild bees for crop pollination: The importance of species identity and community composition.**
Daniel Cariveau and Rachael Winfree, Rutgers, The State Univ. of New Jersey
211 D (Convention Center)
- 2:30 PM** **Floral enrichment of turf lawns and its potential benefit for pollinator communities.**

Ian Lane, Eric Watkins and Marla Spivak, Univ. of Minnesota

200 A (Convention Center)

3:20 PM Farming practices affect nest site selection and productivity of native soil-nesting bees.

Margaret Scampavia¹, Neal M. Williams² and Edwin Lewis². 1 Univ. of California, Oakland; 2 Univ. of California, Davis.

200 D (Convention Center)

Wednesday, Nov 18, 2015

8:02 AM Wild bee community change over a 26-year chronosequence of restored tallgrass prairie.

Sean Griffin¹, Bethanne Bruninga-Socular¹, Morgan Kerr², Jason Gibbs³, and Rachael Winfree¹. 1 Rutgers, The State Univ. of New Jersey; 2 Rowan Univ.; 3 Michigan State Univ.

200 J (Convention Center)

8:05 AM A novel approach to quantifying the importance of wild bees in apple pollination.

Bryan N. Danforth¹, Laura Russo¹, Mia Park², Jason Gibbs³ and Eleanor Blitzer¹. 1 Cornell Univ.; 2 Univ. of North Dakota; 3 Michigan State Univ.

200 E (Convention Center)

9:14 AM Hygiene or hysteria: Pathogens of larvae discarded from bumble bee nests.

Amber D. Tripodi¹, Houston Judd^{1,2} and James Strange¹, 1USDA - ARS, Logan, UT; 2 Utah State Univ.

200 J (Convention Center)

10:48 AM Refinement of techniques for monitoring bee health and productivity in commercial orchards of the Upper Midwest.

Meghan Milbrath and Rufus Isaacs, Michigan State Univ.

200 J (Convention Center)

1:57 PM Variable responses in population genetic structure to climate change within bumble bee communities of the Pacific Northwest.

James Strange, USDA - ARS, Logan, UT

212 AB (Convention Center)

2:51 PM Analysis of pollen collected by honey bees, *Apis mellifera*, in developed areas.

Pierre Lau¹, Juliana Rangel¹, Vaughn Bryant¹, Ana Cabrera², Daniel Schmeihl², Joseph Sullivan³, Zachary Y. Huang⁴ and James D. Ellis⁵. 1 Texas A&M; 2 Bayer CropScience; 3 Ardea Consulting; 4 Michigan State Univ.; 5 Univ. of Florida.

204 AB (Convention Center)

4:52 PM Pesticides found in pollen and nectar collected by honey bees in urban environments.

Juliana Rangel¹, Pierre Lau¹, Vaughn Bryant¹, Ana Cabrera², Daniel Schmeihl², Joseph Sullivan³, Zachary Y. Huang⁴ and James D. Ellis⁵. 1 Texas A&M; 2 Bayer CropScience; 3 Ardea Consulting; 4 Michigan State Univ.; 5 Univ. of Florida.

204 AB (Convention Center)

5:11 PM Using pollen identification to determine which native prairie species honey bees, *Apis mellifera* L., use as major sources of food.

Morgan Carr-Markell, Marla Spivak and Margaret McDermott-Kubeczko, Univ. of Minnesota

204 AB (Convention Center)

Symposia organized by ICP Project Partners (p. 7)

Monday

Plant-Insect Ecosystem (P-IE) Section Networking, Business, and Learning Session on Effective Communication: How to Avoid Pie in Your Face!; 2:00pm-6:00pm,

Convention Center 200D

Organizers: Sujaya Rao and Fred R. Musser

Sunday

The Nascent Mason Bee Industry: Researchers, Entrepreneurs, and Agriculturists Partnering for Pollination Solutions; 8am-noon, Convention Center 200A

Organizers: Cory Stanley-Stahr and Derek R. Artz

Tuesday

How Can Ecosystem Services Support Resilient and Multifunctional Agriculture Systems to Meet the Challenges of the 21st Century?; 1:30pm-5:30pm, Convention

Center Auditorium 1

Organizers: Katharina Ullmann and Timothy Bowles

Wednesday

Integrating Ecological and Social Science to Support Synergies and Applied Solutions in Agroecosystems; 1:30pm-5:30pm, Convention Center 200D

Organizers: Kelly Garbach and Katharina Ullmann

How Cool is Entomology? ; 1:30pm-5:30pm, Convention Center 200B

Organizers: Brian G. Rector and Theresa L. Pitts-Singer