

**Pollinator Support Movement**  
**Albuquerque Film & Media Experience**  
*on campus at University of New Mexico*  
Science and Math Learning Center Auditorium



# ***BeeSWeek*<sup>TM</sup> 2013**

## **Scientific and Community Panel Forums**

### **MONDAY, JUNE 3**

**10 am - 12 pm:** Keynote Speaker, Dr. Valerie Solheim  
**1:15 - 4:30 pm:** Panel Forum Discussions

1. State of the beeS address

The current situation of our available pollinators used today in North American crops

2. An analysis of four bee industries

Lessons and experiences of currently managed types of bees

### **TUESDAY, JUNE 4**

**10 am - 12 pm:** Keynote Speaker, Mr. Paul Wheaton  
**1:15 - 4:30 pm:** Panel Forum Discussions

3. A discussion of today's practices from the perspectives of the farmer and the pollinating contractor

The farmer's usage of chemicals, their available expertise, and known, potential, and sustainable alternatives

4. BeeGAP (Gardeners Adding Pollinators) as a keystone home garden solution

A grassroots, collaborative effort teaching gardeners to create healthy yards, natural bee habitats, raise solitary bees to assist the farmer in crop pollination, and ultimately assist in wholesome food production

**Pollinator Support Movement (PSM)**  
www.pollinatorsupportmovement.com



**Albuquerque Film & Media Experience (AFME)**  
www.abqfilmexperience.com

Present **BeeSWeek™ 2013: Scientific and Community Panel Forums**  
Monday, June 3 • Tuesday, June 4

## ***Keynote Presentations:***

**Day 1:** Monday, June 3, 10am-12pm: **Dr. Valerie Solheim** discusses her book, *The Beehive Effect: Ancient Rites – Quantum Principles*. Her research is indicating that the placement of hives in subtle energy fields is beneficial to the hive colony's health in its ability to protect itself against disease, pest invasion and adverse weather conditions.

**Day 2:** Tuesday, June 4, 10am-12pm: **TBD**

## ***Panel Forums Schedule:***

**Day 1:** Monday, June 3, 1:15 - 4:30pm

**Day 2:** Tuesday, June 4, 1:15 - 4:30pm

## ***General Description:***

Our dependence on honey bees as primary pollinators in most of our crops is a troubling reality. As this pollinator is failing, solutions are needed quickly.

Four (4) panel discussions with expert-professionals, and several presentations by respected keynote presenters will communicate the current North American bees situation, and will discuss the design and implementation of a more robust and sustainable industrial pollination solution set.

## ***Moderator: Jessica Rowland***

Jessica Rowland is a lecturer and education coordinator in the University of New Mexico's Sustainability Studies Program. She teaches interdisciplinary courses on sustainability, local food systems, and climate change, and recently received the 2012-2013 UNM Lecturer of the Year award. Jessica facilitates the UNM Lobo Growers' Market, and collaborates with various campus and community partners to strengthen and develop the local and regional food system. Jessica was raised on a small farm in Western Washington state, but now calls the high desert her home. She holds an MS in stable isotope geochemistry and paleoclimate change from the University of Arizona, and is a board member of La Montañita Food Co-op.

## ***Our Panelists:***

**Day 1:** Monday, June 3, 1:15 - 4:30pm



BeeSWeek™ 2013 Scientific and Community Panel Forums

### **Monday, June 3**

#### **I. State of the beeS address: The current situation of our available pollinators used today in North American crops**

Denise Qualls: Denise ensures that the right bees arrive at the right moments at the right farms across America, and is key to the Honey bee contractor and farmer's success.

Steve Peterson: Dr. Peterson is an entomologist and has experience in pollination with Leafcutter, Mason, and Honey bees. His pollination experience is in conventional, large-scale farming.

Thomas Urrea: Thomas has seen that his bees perform better in organic crops than where chemicals are applied.

Valerie Solheim: Dr. Solheim's research appears to indicate that Honey bee colonies thrive in artificially created high-energy zones that compensate the colonies for the loss of access to these zones, due to the unsystematic placement of the hives by beekeepers.

#### **II. Lessons and experiences of currently managed types of bees: An analysis of four bee industries (Honey, Bumble, Leafcutter, and Mason)**

Dave Hunter: Dave is new to the Mason bee pollination industry, but has a strategic and practical business sense towards operational efficiency. Is each industry correct with what they are doing?

Denise Qualls: Denise is central to the Honey bee industry's success with coordinating pollination.

Jim Watts (Leafcutter and Mason bee): Jim understands the leafcutter and mason bee industries well with over 30 years in the business.

Thomas Urrea (HB Contractor): Thomas is a honey bee contractor that has seen both old style and organic perspectives with the industry.

Steve Peterson: Dr. Peterson understands leafcutter, honey bee, and mason bee industries well from both a researcher's and a pollinator's perspective.

## ***Our Panelists:***

**Day 2:** Tuesday, June 4, 1:15 - 4:30pm



BeeSWeek™ 2013 Scientific and Community Panel Forums

### **Tuesday, June 4**

#### **III. The farmer's usage of chemicals, their available expertise, and known, potential and sustainable alternatives: A discussion of today's practices from the perspectives of the farmer and the pollinating contractor**

**Bruce Milne:** Dr. Milne, a landscape ecologist and Director of the UNM Sustainability Studies Program, represents a local perspective on New Mexico sustainability practices and development of the local foodshed.

**Denise Qualls:** Denise understands monoculture practices well with her central position in the current crops of America.

**Sean Ludden:** Sean provides insight into organic farming practices.

**Steve Peterson:** Dr. Peterson has several years of experience pollinating California almonds with both Honey and Mason bees. He brings a scientific perspective to ensure that methodical best practices are employed during his company's pollination.

**Suzanne Wainwright:** Suzanne, the Buglady consultant, is striving to ensure chemical alternatives are considered in multiple plant industries. She is willing to compare common practices against practical science.

#### **IV. BeeGAP as a keystone home garden solution: A grassroots, collaborative effort teaching gardeners to create healthy yards, natural bee habitats, raise solitary bees to assist the farmer in crop pollination, and ultimately assist in wholesome food production**

**Bruce Milne:** Dr. Milne has co-led a successful organic urban community garden of 20 families for five years.

**Carole Sevilla Brown:** Carole's knowledge of organic practices and years of writing has her well-loved and connected to North American gardeners. She provides extensive support for the gardeners of North America who are creating backyard garden oases.

**Dave Hunter:** Dave believes that our crop pollination practices should not lay solely with the Honey bee. wLean management practices promote multiple alternatives for best, long-term solutions.

**Shirley Tretrault:** Shirley is the President of New Mexico's National Garden Clubs and provides the voice of the North American gardener.

**Steve Peterson:** Dr. Peterson is knowledgeable on the use of solitary bees in crop pollination. His perspective on the pros and cons of bringing in wild or rural bees to commercial crops will provide insight.

**Suzanne Wainwright:** To provide less toxicity to our crops and gardens, Suzanne's provides insight and expert opinions on the effects of beneficial insects in crops, wholesale plant production, and gardens.

## ***Panel Discussion Details:***

**Day 1:** Monday, June 3, 1:15 - 4:30pm



BeeSWeek™ 2013 Scientific and Community Panel Forums

### **Monday, June 3**

#### **I. State of the beeS address: The current situation of our available pollinators used today in North American crops**

Panel members discuss the health of North American pollinators, current management practices, errors and challenging results, proactive advancements, today's concerns, and imminent responsibilities.

- A. Honey bee hardiness overview: Honey bee pollinator reliance, current hive health conditions, Honey bee contractor challenges, imminent concerns, and current crops requiring immediate and intentional focus.
- B. Non-honey bee hardiness overview: Current condition of North America's "other" 4,000+ types of bees, which of those are manageable types, known unknowns, today's concerns, and imminent challenges.
- C. Common issues: Parasites, viruses, disease, pesticides, nutrition and diet, genetics, industrial management errors, and a changing climate.
- D. Humans solving the honey bee challenges: The researchers, the groups, the outlets for discovering solutions, projected impact, and actual solutions.
- E. Humans providing alternate pollinator solutions: A brief introduction to the BeeGAP method, the researchers, and the groups.

#### **II. Lessons and experiences of currently managed types of bees: An analysis of four bee industries (Honey, Bumble, Leafcutter, and Mason)**

When we implement an increase in the types of industrially managed bees, how do the industries operate (positive, negative, neutral), and what are the potential best practices moving forward for the alternate bee industry? How to use critical thinking to express the realities of: flight characteristics, profitability for the bee producers, food supply pollinators and farmers, best health for the bees, sustainable practices, and processes to ease integration within current industrial infrastructure.

- A. Honey bee industry: Leased from private contractors. Contractors moving bees from crop-to-crop creates which issue(s)? Two to five (2-5)-mile flying and foraging range creates which issue(s)? Overlapping of colonies creates which issue(s)?
- B. Leafcutter bee industry: Purchased from a small consortium of private producers. Bees are raised predominantly in Canada with some sustainable supplies from Montana and Wyoming. They are sold to farmers for pollination in the United States. Leafcutter bees are used for local proximity pollination, similar to Mason bees. Why did chalkbrood almost close the industry down? What lessons and experiences learned are to be carried forward?
- C. Bumble bee industry: This bee must be purchased annually from relatively few suppliers. An eight (8)-mile flying range creates which issue(s)? Queens relocate their nests in the spring, which create which issue(s)?
- D. Orchard bee industry: Newly emerging market. Bees are purchased from a variety of sources. New Orchard Bee Association is developing industry standards and best practices. A local proximity pollinator creates which issue(s)? Requires six (6)-weeks of foraging to increase production.
- E. New industry creation: If we were to create a new industry for pollination, what may be the best means for conducting pollination? Which practices are best for the health of the bees, for the farmer, and for North American food security?

## ***Panel Discussion Details:***

**Day 2:** Tuesday, June 4, 1:15 - 4:30pm



BeeSWeek™ 2013 Scientific and Community Panel Forums

### **Tuesday, June 4**

#### **III. The farmer's usage of chemicals, their available expertise, and known, potential and sustainable alternatives: A discussion of today's practices from the perspectives of the farmer and the pollinating contractor**

An analysis of needed chemicals coupled with applied critical thinking to consider what's more important: the bee or the produce, and how to inform consumers to alter current perspectives? Application methods, spraying practices, concerns of the Honey bee contractor, commonsense expectations, Etc. If one adds a pollinator that is outside normal practices, which changes to create sustainable operations are available and recommended?

A. Discussion: Pros and cons of chemical usage for controlling or removing pests, fungus, thinning crops, consumer appeal of the product, and increasing crop health. Analysis of the expertise provided to the farmer and industries.

B. Alternatives: Beneficial insects, organic practices, public and cultural acceptance of "non-perfect" foods, consumer-driven requirements similar to the United Kingdom. Which alternatives are not readily considered?

#### **IV. BeeGAP as a keystone home garden solution: A grassroots, collaborative effort teaching gardeners to create healthy yards, natural bee habitats, raise solitary bees to assist the farmer in crop pollination, and ultimately assist in wholesome food production**

Discuss the contemporary sourcing of bees, and implications of the role and responsibilities for farmers and gardeners. Accomplishing the simple BeeGAP solution includes educating farmers and gardeners about: how to produce healthy yards and bees, implementing efficient and Earth-friendly logistics to get bees from yards to orchards/crops, and the necessary shift of the traditional food producing farmer, to sustainable and bee-safe practitioner and operators. (Although most farmers work to ensure pollinators are healthy, chemical practices and potential longer-staying bees on orchards/crops may require alternate solutions.)

A. Cleaning-up North America's residential yards: Chemicals being sold to, and "expertise" being offered to "busy Americans". Understanding and assessing capabilities on how to reach, teach, and shift gardeners to safer, more sustainable "backyard" practices. In which practices are the "backyard gardeners" able to increase their personal sustainability practices and create excess bees?

B. A new model asks: "What - exactly - is being grown?" How to encourage planting of different plants than are currently being sold in nurseries? More food gardening? More native species? A new concept for cultural shift: "Less green lawn is more American."

C. Standards for bee distribution: Creating commonsense operating standards to ensure that quality bees are provided to prospective orchards. Standards may include: diversified genetics, bees in similar geographic locals, sustainable practices, and rewards for program participants. (Ex: gardeners, logistic providers, and farmers, Etc.)

D. Raising bees for self and others: Which combinations of systems and tools may be helpful and effective in encouraging gardeners to allocate and move excess bees to farmers in need? What message is necessary, and with which mechanism(s) will they be reached?

E. Traditional avenues of influence: Media being supplied expert advice and guidance (Ex: print, public service announcements), Bee University, celebrity and community influencers, land preserves and garden clubs, Etc.