February is always an exciting month for us as we anticipate the 27th Annual Urban Pest Management Conference. Get ready to catch up with old friends and meet new visitors to our conference during two days of educational excellence. We have a great lineup of speakers, topics, and exhibitors this year and I’m sure it will be of great value to everyone who attends. A lot of very hard work goes into making our conference what it is, so if you see someone from the planning committee, please show them some appreciation.

Over the course of the last couple of years District 2 Director Carl Braun and myself have worked with the National Pest Management Association (NPMA) as State Policy Affairs Representatives. This program provides local boots on the ground to represent our interests in the State of Nebraska. The NPMA is the most credible and tireless advocate for the pest management industry in Congress, before federal agencies, the administration, and in the courts. Education and representation by the NPMA are an invaluable resource available to us all.

A recent issue that was brought to my attention, while it isn’t relevant to most Nebraska operators, does give a good case in point, demonstrating the vigorous level of awareness and action that the Association provides. Since October of 2002, Nebraska commercial pest control services are subject to sales tax on the state and county level. Obviously, when this was enacted, it resulted in an immediate rise in cost of services to our customer. If a law like that were enacted at today’s tax rates, it would result in a price rise ranging from 5.5%-7.5% across the board. Our customers would pay significantly more money for the exact same services that they have received for years. As I will highlight, there are many negative consequences to a rule like this, but from an immediate business owner perspective, it crippled our ability to institute regular and necessary price increases for years to come, in tandem with increasing the administrative costs of calculating and filing the taxes collected. At the time, and to this day, those that were involved in the State Association at the time agree that we were poorly represented by the lobbyists we had employed to fight the bill. Thus, we began, and will likely continue to collect sales taxes on commercial pest control services. The NPMA however, defeated two such sales tax bills in the state of Virginia in 2018. We are currently involved in weighing in and monitoring a similar proposal in the state of Wyoming. The arguments contesting the bill are many and reach beyond the negative impact on us as operators.

Public health officials attribute the quality of life we have today to three things: better pharmaceuticals, vaccines, and better sanitation and better pest control. The proposed service taxes would raise the cost of protecting against the following dangerous and deadly pests: Rodents, Cockroaches, Flies, Mosquitos, Ticks, and Stinging Insects. Some pest control is provided to customers with disposable income to make their homes more comfortable, but the bulk of what we provide promotes health and safety to the public at large, including those with limited resources.

In addition to hindering the public’s access to safe living conditions, sales taxes also pass burdensome increases in operating costs to those in the food and hospitality industries which rely on our services. As in most cases, an increase in operating costs can encourage businesses to employ DIY measures, far less effective and potentially dangerous to staff and customers.

These are just a couple of highlights from the NPMA actively researching and addressing an issue like this in a low population state with few PCO’s to defend. But it is the NPMA’s mission to apply their vast and growing experience to inform us, the public, our legislator’s, and to work in behalf of our shared interests.

Here’s to a great 2019 and I look forward to seeing you all in Lincoln!
**NSPCA DIRECTORS & OFFICERS**

- **Travis Lucas**, ACE President
  Benzel Pest Control
  813 Morrison Road
  Gering, NE 69341
  (308) 632-3437

- **Brad Kuiper**
  Government and Legislative Chairman
  Heartland Pest Control
  820 Burns St.
  Gretna, NE 68028
  (402) 332-4707

- **Shawn Ryan**, Vice President
  Heartland Pest Control
  820 Burns St
  Gretna, NE 68028
  (402) 332-4707

- **Tracy Connor**
  District 1 Director
  City Wide Termite & Pest Control
  14330 Corby Street
  Omaha, NE 68164
  (402) 733-1784

- **Andy Licht**
  Nebraska State Pest Control Association
  8700 Executive Woods Dr, Ste 400
  Lincoln, NE 68512
  (402) 476-1528

- **Carl Braun**
  District 2 Director
  Quality Pest Control
  PO Box 12140
  Omaha, NE 68114
  (402) 738-9164

- **P. R. Olson**
  District 3 Director
  Olson’s Pest Technicians
  PO Box 808
  Norfolk, NE 68702
  (402) 371-7976

- **Dave Ryan**
  District 4 Director
  Carey’s Pest Control
  PO Box 895
  Hastings, NE 68902
  (402) 463-9416

- **Gregory Poppe**
  District 5 Director
  Poppe Enterprises, LLC
  PO Box 2042
  Hastings, NE 68902
  (402) 984-2856

- **Wayne Lucas**
  District 6 Director
  Benzel Pest Control
  813 Morrison Road
  Gering, NE 69341
  (308) 632-3437

---

**Get The Most Out Of A Pest Industry Meeting, Conference**  By Diane Sofranec

The professionals who contribute to Pest Management Professional have been to many industry events. We asked them: What is the best way to get the most out of pest industry meetings and conferences?

- **Stuart Aust**: Introduce yourself to as many PMPs as possible, and exchange business cards and your contact information. Building relationships and networking is key to growing your business.

- **Dr. Austin Frishman**: Plan ahead. Make a list of who you want to see, the questions you want answered and the talks you want to hear. Take notes and share them with your coworkers.

- **Dr. Doug Mampe**: Introduce yourself to other PMPs and learn about their businesses. Something they are doing might be valuable to you.

- **Frank Meek**: Network, network and network some more. Most of us old-timers are very willing to help others, especially new people coming into the industry.

- **Pete Schopen**: Attend sessions on hot topics, unbiased scientific breakthroughs and business strategies. Participate in small group sessions, raffles, door prizes, etc.

- **Kurt Scherzinger**: Attend not only the educational hours, but the after-hours planned events and talk with people you may not have met before. This industry is very open, and everyone wants to help each other succeed.

- **Mark Sheperdian**: Sit up front. You’ll get the message before all those slackers sitting in the back row. Write down questions for the presenters about the topics in the sessions you will be attending. Don’t count on being able to remember them all at the appropriate time. Take a tablet (or a pen and paper if you prefer) and record notes.

- **Dr. Stephen Vantassel, CWCP**:

  1. Take notes.
  2. Bring lots of business cards.
  3. Invite speakers or colleagues in other territories to lunch and dinner.
  4. Take at least one class out of your comfort zone.
  5. Talk with vendors.

---

*Reprinted from Pest Management Professional*
We look forward to seeing you at this year’s UPM Conference. The Conference will take place at the Cornhusker-Marriott Hotel (333 South 13th St, Lincoln, NE 68508) on February 21-22, 2019. This conference is a joint effort put forth by the University of Nebraska-Lincoln Extension and the Nebraska State Pest Control Association with support and guidance from the Nebraska Department of Agriculture.

Whether you need to re-certify your applicator license or simply want to stay up-to-date on the latest techniques and products in the industry, this annual meeting is an excellent opportunity to connect with other pest professionals in Nebraska.

Registration information is included in the newsletter and on the Association website, nspea.org/upm, where online registration is also available.

Some of the highlights of the program include:
- Two days of pest control presentations
- Open laboratory of specimens and damage with Dave Nielsen, State Survey Coordinator, NDA
- Thursday Lunch included in registration
- Exhibit Hall and Exhibitor’s Reception with Hors d’oeuvres and drinks
- Initial Commercial Applicator Pesticide Testing in General Standards and Specific Category
- Re-certification for commercial pesticide applicators in up to three categories
  - 08 Structural/Health Pest Control
  - 08W Wood Destroying Organisms OR 11 Fumigation Session
  - 09 Public Health Pest Control or 11 Fumigation (Videos available Feb. 21 at 5pm)

Don’t Miss The Urban Pest Management Conference
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td>Conference Registration</td>
</tr>
<tr>
<td>7:45 am</td>
<td>Opening Welcome &amp; Special Presentations, NSPCA, NDA</td>
</tr>
<tr>
<td></td>
<td><strong>Laboratory Open</strong></td>
</tr>
<tr>
<td>8:00 am to 5:00 pm</td>
<td>Structural Pests/Occasional Invaders, Wood Destroying Pests, University of Nebraska, Lincoln, NE</td>
</tr>
</tbody>
</table>

**General Sessions**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am</td>
<td><strong>Understanding Innovation: A Scientific Approach to Pest Management.</strong> <em>Bob Davis</em>, PhD, BCE, Technical Service Representative, BASF Professional and Specialty Solutions, Pflugerville, TX</td>
</tr>
<tr>
<td>8:45 am</td>
<td><strong>Blood, Sweat and Fears: Bed Bugs, Bat Bugs and a Public Health Update.</strong> <em>Nancy Troyano</em>, PhD, BCE, Director of Technical Education, Rentokil North America, Allentown, PA</td>
</tr>
<tr>
<td>9:30 am</td>
<td><strong>They're Coming Out Of The Woodwork: Managing Brown Recluse Spiders.</strong> <em>Tim Husen</em>, PhD, BCE, Manager of Technical Services, Rollins, Atlanta, GA</td>
</tr>
<tr>
<td>10:00 am</td>
<td><strong>Break - Coffee/Soft Drinks and Opportunity to Visit Exhibitors</strong></td>
</tr>
<tr>
<td>10:30 am</td>
<td><strong>Tales from the Myrmecologist: How to Battle the Ants.</strong> <em>Sylvia Kenmuir</em>, BCE, Director of Technical Training, Target Specialty Products, Santa Fe Springs, CA</td>
</tr>
<tr>
<td>11:00 am</td>
<td><strong>Hickory Dickory Dock: Understanding What Makes House Mice Tick.</strong> <em>Jim Fredericks</em>, Vice President, National Pest Management Association, Fairfax, VA</td>
</tr>
<tr>
<td>11:30 am</td>
<td><strong>Technologies in Rodent Management.</strong> <em>Sylvia Kenmuir</em>, BCE, Director of Technical Training, Target Specialty Products, Santa Fe Springs, CA</td>
</tr>
<tr>
<td>12:00 pm</td>
<td><strong>Lunch Served – Exhibitor Introductions</strong></td>
</tr>
<tr>
<td>1:00 pm</td>
<td><strong>Today's Commercial Kitchen Forecast: Unsanitary, With a Chance of Fruit Flies.</strong> <em>Nancy Troyano</em>, PhD, BCE, Director of Technical Education, Rentokil North America, Allentown, PA</td>
</tr>
<tr>
<td>1:30 pm</td>
<td><strong>Update on West Nile Virus in Nebraska.</strong> <em>Tom Janousek</em>, PhD, Pest Consulting Services, Omaha, NE</td>
</tr>
<tr>
<td>2:00 pm</td>
<td><strong>Managing Perimeter Pests, Janet Kintz-Early</strong>, PhD, Urban Entomologist, JAK Consulting Services, Knoxville, TN</td>
</tr>
<tr>
<td>2:30 pm</td>
<td><strong>Break - Coffee/Soft Drinks and Opportunity to Visit Exhibitors</strong></td>
</tr>
<tr>
<td>3:00 pm</td>
<td><strong>Flea Management: What's Old is New Again!</strong> <em>Jim Fredericks</em>, PhD, BCE, Vice President, National Pest Management Association, Fairfax, VA</td>
</tr>
<tr>
<td>3:30 pm</td>
<td><strong>The Wonder of Wasps: Friend or Foe?</strong> <em>Donald Lewis</em>, PhD, Extension Entomologist, Iowa State University, Ames, IA</td>
</tr>
<tr>
<td>4:00 pm</td>
<td><strong>Little Brown Beetles: So Many to Choose From.</strong> <em>Donald Lewis</em>, PhD, Extension Entomologist, Iowa State University, Ames, IA</td>
</tr>
<tr>
<td>4:30 pm</td>
<td><strong>Secrets of Cockroach Management.</strong> <em>Janis Reed</em>, PhD, BCE, Technical Services Manager, Control Solutions Inc., Pasadena, TX</td>
</tr>
<tr>
<td>5:00 pm</td>
<td><strong>Certification Videos, Categories 09 (Public Health) &amp; 11 (Fumigation).</strong> 5-6:30 pm</td>
</tr>
<tr>
<td>5:00 pm</td>
<td><strong>Exhibitors' Reception – Hors D'oeuvres &amp; Drinks</strong></td>
</tr>
</tbody>
</table>
Detailed UPMC Agenda

Friday, February 22, 2019

**Laboratory Open**
8:00 am to 5:00 pm  Structural Pests/Occasional Invaders, Wood Destroying Pests, University of Nebraska, Lincoln, NE

**Wood Destroying Session (08W)**
8:00 am  Termite Myths and Lies. Janis Reed, PhD, BCE, Technical Services Manager, Control Solutions Inc., Pasadena, TX
9:00 am  Construction Conducive Conditions. Kristen G. van den Meiracker, PhD, BCE, Urban Entomologist, JAK Consulting Services, Knoxville, TN
9:30 am  Post-patent termiticide: Taurus® SC vs. Termidor® SC Studies, Janis Reed, PhD, BCE, Technical Services Manager, Control Solutions Inc., Pasadena, TX

10:00 am  Break - Coffee/Soft Drinks and Opportunity to Visit Exhibitors
10:30 am  Determining the Proper Amount of Materials to be Applied for Termite Services, Bob Davis, PhD, BCE, Technical Service Representative, BASF Professional and Specialty Solutions, Pflugerville, TX
11:15 am  You Mean There is More Than Termites: Controlling Other WDI, Tim Husen, PhD, BCE, Manager of Technical Services, Rollins, Atlanta, GA

12:00 pm  Lunch Break on your own
12:00 pm  Nebraska State Pest Control Association Member Lunch

**Laboratory Open**
12:00 pm to 5:00 pm  Structural Pests/Occasional Invaders, Wood Destroying Pests, University of Nebraska, Lincoln, NE

**Fumigation Session (11)**
8:00 am  PH3 Application, Movement and Safety Considerations. Dick Bigler, Business Development Manager, Douglas Products, Granbury, TX
9:00 am  ProFume Stewardship Training. Bob Braun, Business Development Manager, Douglas Products, Omaha, NE

10:00 am  Break - Coffee/Soft Drinks and Opportunity to Visit Exhibitors
10:30 am  Stored Product Pest Research Update, Rob Morrison, Research Entomologist, USDA-ARS Center for Grain and Animal Health Research
11:15 am  FMP, Monitoring, Safety. Q&A, Greg Poppe, President, Poppe Enterprises, LLC, Hastings, NE

12:00 pm  Lunch Break on your own
12:00 pm  Nebraska State Pest Control Association Member Lunch

**Laboratory Open**
12:00 pm to 5:00 pm  Structural Pests/Occasional Invaders, Wood Destroying Pests, University of Nebraska, Lincoln, NE

**CLOSING SESSION: Required for Recerti/UNIf001cation**
Clyde Ogg, Pesticide Safety Education Program, University of Nebraska-Lincoln Extension, Lincoln, NE.

1:30-3:30 pm  Re-Certi/UNIf001cation Program & Initial Testing
Bees Stopped Buzzing During the 2017 Total Solar Eclipse

While millions of Americans took a break from their daily routines on August 21, 2017, to witness a total solar eclipse, they might not have noticed a similar phenomenon happening nearby: In the path of totality, bees took a break from their daily routines, too.

In an unprecedented study of a solar eclipse’s influence on bee behavior, researchers at the University of Missouri organized a cadre of citizen scientists and elementary school classrooms in setting up acoustic monitoring stations to listen in on bees’ buzzing—or lack thereof—as the 2017 eclipse passed over. The results, published in the Annals of the Entomological Society of America, were clear and consistent at locations across the country: Bees stopped flying during the period of total solar eclipse.

“We anticipated, based on the smattering of reports in the literature, that bee activity would drop as light dimmed during the eclipse and would reach a minimum at totality,” says Candace Galen, Ph.D., professor of biological sciences at the University of Missouri and lead researcher on the study. “But, we had not expected that the change would be so abrupt, that bees would continue flying up until totality and only then stop, completely. It was like ‘lights out’ at summer camp! That surprised us.”

As anticipation mounted for the eclipse, “it seemed as if everyone and their dog was asking me what animals would do during a total eclipse,” Galen says. However, few formal studies had ever examined the behavior of insects, specifically, during a solar eclipse, and none had looked at bees. Galen and colleagues, meanwhile, had recently field-tested a system to track bee pollination remotely by listening for their flight buzzes in soundscape recordings.

“It seemed like the perfect fit,” Galen says. “The tiny microphones and temperature sensors could be placed near flowers hours before the eclipse, leaving us free to put on our fancy glasses and enjoy the show.”

Supported by a grant from the American Astronomical Society, the project engaged more than 400 participants—including scientists, members of the public, and elementary school teachers and students—in setting up 16 monitoring stations in the path of totality in Oregon, Idaho, and Missouri. At each location, small USB microphones were hung on lanyards near bee-pollinated flowers in areas away from foot and vehicle traffic. In some of the locations, light and temperature data were also captured. Participants then sent the devices to Galen’s lab, where the recordings were matched up with the eclipse periods from each location and analyzed for the number and duration of bee flight buzzes. The recordings didn’t allow for differentiation between bee species, but participant observations indicated most bees monitored were bumble bees (genus Bombus) or honey bees (Apis mellifera).

The data showed that bees remained active during the partial-eclipse phases both before and after totality, but they essentially ceased flying during the period of totality. (Just one buzz was recorded during totality in all of the 16 monitoring locations.) However, shortly before and shortly after totality, bee flights tended to be longer in duration than at times early in the pre-totality phase and late in post-totality. Galen and colleagues interpret these longer flight durations as an indicator of slower flight under reduced light or possibly as the bees returning to their nests.

Bees commonly fly more slowly at dusk and return to their colonies at night, and so the same behavior triggered by a solar eclipse offers evidence about how they respond to environmental cues when those cues occur unexpectedly.

“The eclipse gave us an opportunity to ask whether the novel environmental context—mid-day, open skies—would alter the bees’ behavioral response to dim light and darkness. As we found, complete darkness elicits the same behavior in bees, regardless of timing or context. And that’s new information about bee cognition,” Galen says.

The researchers also noted the success of the project in engaging students in scientific inquiry and practice. At elementary school classrooms in Columbia, Missouri, for instance, Galen and colleagues report that “young students were asked to predict how bees would respond to the eclipse. Students made predictions based on their life experience, proposing that bees would cease flying at totality because they do not fly at night. After the eclipse, sound clips were shared with students who learned how to measure the frequency, amplitude, and duration of buzzes, and how to use these properties to recognize and count bee buzzes in recordings made at their schools. Fourth and fifth grade students produced buzz counts that matched our research team’s numbers with a correspondence rate of 91 percent.”

Another total solar eclipse for North America is not far away: April 8, 2024. Galen says her team is working to enhance its audio-analysis software to distinguish the flights that foraging bees make when they leave or return to their colonies. Thus prepared, she hopes to answer the question of whether bees return home when the “lights go out” at totality in 2024.

It likely won’t be difficult to find willing citizen scientists and students to help out again.

“The total solar eclipse was a complete crowd-pleaser, and it was great fun to hitch bee research to its tidal wave of enthusiasm,” Galen says.
REGISTRATION FORM

Name ____________________________________________

Company _________________________________________

Address __________________________________________

City __________________________ State ______ Zip ________

Email ____________________________________________

UPM Conference Registration, February 21-22, 2019

Number of Attendees _______ @ $150 each.................................$ ________________

Exhibit Booth _______ @$400 each.............................................$ ________________

(One free attendee registration per booth space ordered. All others pay $150.00 each)

Names of Attendees:

1. ___________________________ Email ___________________________

2. ___________________________ Email ___________________________

3. ___________________________ Email ___________________________

4. ___________________________ Email ___________________________

Total Amount Due......................$ ________________

Please make checks payable to Nebraska State Pest Control Association or pay by credit card below.

Credit Card Number________________________________________ Name on Card____________________________

Card Type _______ Expiration date ____________________________ Security Code ________________

Billing Address for Card ___________________________________

Return the registration form to the Nebraska State Pest Control Association at:
8700 Executive Woods Dr., Ste 400, Lincoln, NE 68512
or register online at www.nspca.org/upm/
Use Gentrol® IGR and Gentrol® Complete as part of any treatment protocol as an insurance policy against future re-infestations. Both contain an insect growth regulator (IGR) to stunt pest growth and prevent reproduction. With a low toxicity, the translocating active ingredient can be used in sensitive areas and covers hard-to-reach locations, giving your clients peace of mind. Plus, Gentrol® Complete also has an adulticide, providing quick knockdown. The Zo·con® team of experts is ready to help you find your perfect Gentrol® formulation.

Contact your local sales representative, Jake Clabaugh, at 816-469-9682 or visit ZoeconFieldGuide.com to learn more.

Zoecon.com