Save The Dates
Jan 29th & 30th

Welcome to Fabulous
Las Vegas
PEST EXPO 2018

Create your own learning experience
with over 20 hours of CEUs to choose from including:

Ants, Bed Bugs, Bees, Flying Insects, Integrated Pest Mgmt,
Laws & Regs, Mosquitoes, Pigeons, Rodents, Scorpions, Stored
Product Pests, Termites, Turf & Ornamental, Business
Management, Marketing, Recruiting & Hiring and More!!!
Hello. On behalf of the Board of Directors and the officers of the Nevada Pest Management Association (NVPMA), I would like to offer you a sincere “Thank You” for your interest and involvement in our industry. It is a wonderful time to be a part of Nevada’s thriving pest management industry. As the voice of our industry in Nevada, it is our honor to serve our members and I am grateful to be a part of such a wonderful organization.

Since its inception, the Annual Pest Expo has been a lecture series. The NVPMA Expo committee has committed to revitalizing the Expo with a larger conference format, breakout sessions, and hands on training. Please take some time to look at the schedule of events for the upcoming Expo. I’m sure you will be as excited as I am to see the changes to the event and to be a part of it in January. We look forward to seeing you there.

As the busy summer of 2017 winds down, I would like to encourage you to expand the role you take in our organization. Please consider supporting our association by becoming a Premium member or by serving on one of our numerous committees. Enclosed in this publication is the contact information for our Committee Chairs. This is a great way to influence the direction of our association and to affect our policy positions when helping the Nevada Department of Agriculture draft and amend regulations that will directly affect your bottom line.

I am honored to be serving as the President of our association. Thank you for the opportunity to be of service. I am a member of our association because I find value in supporting the industry that I call home. I know that you see the value in partnering with us and in working together to protect our industry. I am looking forward to 2018 with optimistic eyes.

By Joey Toth
NVPMA President
pres@nevadapma.org
Reducing liability requires constant re-evaluation of how you operate and what new challenges arise with new technology and public attitude. Here is my list based on working with and talking to PM companies big and small.

Not surprisingly, most of our problems are not pesticide poisoning related. Let us look at a few of the most prevalent situations.

Annual physical. All employees working for you should have an annual physical. Include in that physical for technicians and supervisors the following information.

• Are they capable of wearing a respirator?
• Are they allergic to bee and/or wasp stings?
• Are they extra sensitive to mosquito and/or flea bites?
• Are they reactive to cockroaches and/or rodent allergens?
• Did they have an eye examination?
• Do you do background checks on their driving record? Go back at least two states in which they have lived.
• Are you providing employees with a driver’s safety test? Your appropriate insurance company can help you with this.
• With more and more drivers relying on their smart phone to locate their next stop, it is essential that the smart phone be mounted in such a way that they are not looking down to read it. Rear end collisions are up because of this factor.
• It is best for all drivers to pull over to a safe location before determining where the next stop is. I have watched too many Uber drivers and PMP technicians put their lives and mine in jeopardy.

Another big claim comes from falling down while walking at ground level. When you walk with a flashlight in one hand and piece of equipment in another, your hands are not ready to adjust for a fall. Combine this with a slick floor or ice outside and the number of technicians suffering injuries by falling is proportionately higher than persons in other type work.

Mass Media - Have all employees sign a statement that they will not text, tweet, use the internet, social media and similar mode of communication in a negative manner concerning fellow employees, customers and any business related matter.

When installing rodent bait stations, photo its location and method of installing (providing you are following label directions). File all such digital photos. Conduct unannounced and announced vehicle inspections. Before doing this, issue a list of permanent and replaceable items that are to be on each vehicle. Include all personal protection equipment mandated by all the pesticide labels carried in each vehicle.

Maintain an active file on written quizzes for all pesticide / SDS sheets. Do so for each person who uses pesticides. Update yearly and whenever label wording changes.

Video spill control training classes. Utilize professional ladder safety videos. Whatever happened to just killing pests? Oof! Try thinking up a better name than killing as it is no longer in vogue. We have to be more humane.

DISCOVERY RETREATS
Upcoming schedule mark your calendar!

For more than 15 years the Discovery Retreats have been run and owned by Lloyd Smigel. If you want the straight scoop from someone who has “been there, done that”, this could be the opportunity to change your business for the better!

Pat VanHooser has held just about every job in the pest management field: technician, trainer, manager, office specialist and janitor. She is a straight forward coach with the answers you may not want to hear - but need to.

AUGUST 18 AND 19, 2017
Family business – making it work.
If you have friends and family working in your business it can be a nightmare. Let’s fix it!
We will also cover “Who’s going to take over when I’m gone?” Unless you plan to stay until you drop dead and don’t care what happens after that – you might want to consider coming to this one!!

NOVEMBER 10 AND 11, 2017
The future of pest control – are you ready?
Liability, protecting what you have built, new technology – what business will look like in the near future and you need to get ready.

Lloyd Smigel
Industry Guru
Pat VanHooser
40 Years Professional PCO

Join us in Dallas for up-coming retreats. Call Pat for any questions and registration information 816-888-9146.
An employee who feels stuck in a position will only stay for so long. They will either wait for another year or two or just start looking. Now you lose a good employee and it will cost you at least $10,000 to replace that employee. (That’s the lowest cost that I have seen within the industry. If they are in supervision or management, the cost is substantially higher). This boils down to 4 things: 1. Do what you say you are going to do. 2. Have quarterly informal evaluations with your people to ensure you’re doing what you said you would do. 3. Invest in your people and company. 4. Do nothing and keep on losing good personnel.

What generally happens if you invest in your people is you will lower your profits and increase your growth. The company value goes up. Your turnover goes down. If you can’t afford to lower your profits, it’s time to evaluate your company. Better organization, higher prices, more effective services, better routing, etc. etc. The point is that if you want something you’ve never had before, you have to do something you’ve never done before. Change is hard. Stagnation is harder. Good luck!
Bats are small, flying mammals from the order Chiroptera. Of the species found in Kansas, almost all are insectivores that feed on vast numbers of night-flying insects, making them an important part of the ecological community.

Bats have relatively long lives—5 to 30 years depending on the species—and are among the slowest reproducers for their size of any mammal. For example, the little brown bat, the most frequent user of artificial bat habitats in the United States, can live for 3 decades with the female giving birth to 1 pup per year. In most cases, bats don’t cause problems for homeowners or gardeners because of their nocturnal habits, you rarely will see them. Because they eat insects, bats also might provide some control of insect pests in the landscape. Problems that do occur often happen when bats roost in buildings. Their droppings can accumulate, they can make noise, and some people are uncomfortable with close proximity. Bats also can transmit diseases, with rabies being a special concern. As mammals, bats have fur, give birth to living young, and provide their young with milk. In spring, female bats form colonies to give birth and rear young. Roosting sites include buildings, bridges, or other structures as well as caves or tree cavities. Adults leave roosts at night to forage for insects. Young bats develop rapidly, and most are able to fly within a month or two after birth. Generally males and females with young will roost separately, but in late summer or fall, males might join the colony, and bats might migrate to warmer areas or hibernation roosts in the winter when insects are scarce.

Bats are excellent flyers and navigate using echolocation to capture insects in flight during the night. Because bats consume large numbers of insects, their droppings and urine accumulate beneath roosts, creating odors and attracting insects. Their droppings and urine can make noise, and some people make pets of bats. Bats don’t want to bite you either, but any animal can bite if scared, sick or handled. Even when bats are sick, they tend to just go off quietly to die. Try to let a frightened bat in your home outside as quickly as possible if it has not had any contact with pets or people.

Do Bats chew through wires?
Most likely it is mice not bats. Bats don’t chew through building materials or wood like rodents. They may kick out some insulation as they enter and exit the attic or walls though.

Why can’t Bats be excluded during breeding season?
During this period there may be baby bats present. Baby bats are unable to fly and have to be nursed and taken care of by the mothers. A female bat will have only one pup a year and she takes very good care of it. If we install the one way valves that do not allow the mothers to come back from their evening hunt the baby bats could die and cause a dead animal smell and may even attract some carrion insects into the structure.

How can you tell if the black droppings are Bat droppings or Mouse droppings?
Take a stick and try to roll or smear the dropping. Mice droppings are harder, and they tend to roll. Bat droppings, if fresh, are very soft and it will smear. If it is a little old, it will crumble into powder. Many times you can see shiny bits of insects in the bat droppings. How are the concerns about Bats?
Although bats provide benefits by feeding on insects, they also can carry diseases to humans and other animals. You can greatly minimize the risk of disease transmission by never handling bats, not breathing dust from bat droppings, and vaccinating your dogs and cats against rabies. It is very important to educate children never to touch a bat, dead or alive. Bats also create unsanitary conditions when their droppings and urine accumulate beneath roosts, creating odors and attracting insects. Bats that you find on the ground or out in the open during the day aren’t always sick. If they are in an area where they aren’t harming anyone and pets and children aren’t likely to find them, leave them alone for an hour or two. They may just be tired. If they are in an area where children or animals might find them, gently scoop the bat into an open box, wearing leather gloves to prevent touching the bat with your bare hands, and move it to a place where no one can come into contact with it. If the bat has been in contact with pets just want to be left alone. In South American countries, some people make pets of bats. Bats don’t want to chase you, although it could seem to you like they are because of their very fast, seemingly erratic flying. Bats don’t want to bite you either, but any animal can bite if scared, sick or handled. Even when bats are sick, they tend to just go off quietly to die. Try to let a frightened bat in your home outside as quickly as possible if it has not had any contact with pets or people.

Bats are excellent flyers and navigate using echolocation to capture insects in flight during the night. Because bats consume large numbers of insects, they also can carry diseases to humans and other animals. You can greatly minimize the risk of disease transmission by never handling bats, not breathing dust from bat droppings, and vaccinating your dogs and cats against rabies. It is very important to educate children never to touch a bat, dead or alive. Bats also create unsanitary conditions when their droppings and urine accumulate beneath roosts, creating odors and attracting insects.

FREQUENTLY ASKED BAT QUESTIONS

Will bats attack or chase people?
Bats do attack and chase people in the movies. But in real life, bats are by nature timid animals, and some people have installed bat houses with the idea that colonizing bats might control mosquitoes or other pest insects.

FREQUENTLY ASKED BAT QUESTIONS

Will bats attack or chase people?
Bats do attack and chase people in the movies. But in real life, bats are by nature timid animals, and some people have installed bat houses with the idea that colonizing bats might control mosquitoes or other pest insects.

We deliver solutions for the pest management industry in MORE ways than one.

Continued on page 10
A rat has to eat a lot to maintain its rather vulnerable physiology. A rat’s physiological data includes some interesting numbers.

- Life Span: 2 to 3 years
- Adult weight: 250 to 1000 grams
- Water consumption/day: 8 to 11 milliliters/100 grams body weight
- Food consumption/day: 5 grams/100 grams body weight
- Heart rate: 300 to 500 beats per minute
- Respiratory rate: 80 to 90 per minute
- Urine output: 5.5 milliliters/100 grams body weight per day

As a pest management professional, have you observed pestiferous, hungry rats avoid your favorite lure or bait? How does this happen? Maybe, just maybe, it must have been something the rat ate!

A learned as well as associative response to eating toxic food is called taste aversion. Upon a taste aversion event, the “guilty foods” are avoided (even if the foods are innocent of causing any real illness).

For example, imagine yourself as a rat. You are “ratlaxing” after consuming some tasty bacon grease with a side of very old non-toxic bait. All of a sudden, you feel ill, and continue to feel ill for several hours. As time passes, you feel better, but you remember the smells and tastes. You associate the smells and tastes with that former nauseous feeling. The once most-tasty food is now the most-disgusting food! You will never consume bacon grease and non-toxic bait again!

In 1966, using lab rats, psychologists John Garcia and Robert Koelling conducted research on taste aversion. Research included observing the effects of radiation upon laboratory rats. Within the radiation chambers, lab rats avoided drinking water out of plastic bottles. Discovering rats might be associating plastic-tasting water with radiation sickness; an experiment was designed to test the hypothesis.

After drinking sugar water, three groups of rats were exposed to low, medium or high radiation doses. High radiation doses resulted in severely ill rats. The hypothesis proved correct as after receiving high radiation doses, rats associated sugar water with illness. Later, the majority of those rats rejected sugar water.

Prior to the rats’ radiation exposure, sugar water was a neutral stimulus (causing no response). Radiation exposure created an automatic response of illness. Within the experiment, radiation was the unconditioned stimulus, and illness was the unconditioned response. Rats were conditioned when their illness from the radiation was combined with the sugar water. The sugar water became the conditioned stimulus as the illness became the conditioned response. Rats avoided sugar water, just like they might avoid bacon grease, non-toxic bait, or some other lure.

Taste aversion demonstrates that classical conditioning has an important adaptive purpose or assists in survival. Descendants learned to avoid potentially deadly foods by the process of conditioning. Avert the aversion! With an understanding of taste aversion, pest management professionals can successfully adapt their rodent management practices.

By Dr. Stuart Mitchell
PostWest USA

IT MUST HAVE BEEN SOMETHING THE RAT ATE!

or people, take it to the county health department, so trained professionals can check it for rabies. Once a bat has died, it is too late to check for rabies, because the rabies virus dies shortly after the host does.

Bats roosting in barns or other outdoor buildings might not cause any harm. Some people encourage bats by placing bat houses on their property. However, because of the threat of rabies and other diseases, bats should be discouraged from nesting at locations where people congregate, such as schools, parks, public buildings, or homes. Bats flying inside inhabited buildings should be removed or excluded. If you suspect bats are roosting in your building, you’ll need to carefully look for signs of them. Bats can squeeze through openings as small as 1/4 inch. Cracks around windows, doors, pipes, electrical wiring, or vents can provide access. Being alert to off odors or to droppings beneath openings can help you locate roosts and entry points. Return late in the evening, just before dark, to observe how bats are gaining entry into a building by watching where they fly out. Exclusion is the primary way to manage bats, but you’ll want to be sure all bats have left the structure before you seal it up completely. Most bats you discover indoors will be flying, but some might be roosting or asleep. During cool weather, bats can become torpid; this reduced

CONTINUED FROM PAGE 8

CONTINUED ON PAGE 16

Holes in Your Insurance Coverage?

Pest Control Insurance is our Specialty and We Represent a Number of Companies That Have Specific Programs and Coverages to Make Sure That Your Unique Insurance Needs Are Met.

Contact us to request a quote:
ph: 208-327-3400   toll free: 877-342-7935 www.insuremeplus.com

Continued on page 16
They're quick learners.
Cockroaches can develop resistance to single active ingredients over time.

Now, Optigard® Cockroach Gel Bait introduces a unique active ingredient, emamectin benzoate, giving them a challenge they haven’t seen before.

So when you rotate it with Advion® Evolution Cockroach Gel Bait or Advion® Cockroach Gel Bait, you’ll outsmart even the brightest cockroaches.

To learn more, visit: SyngentaPMP.com/CockroachSolutions

What THE BUZZ? - You’ve got Questions, we’ve got Answers!
Q: What makes a bug a bug and not just an insect?
A: A bug is an insect that has hemelytra, which are specialized V-shaped wings, and piercing-sucking mouthparts with a long beak folded down under its head.

BUZZ Word! - Buzzworthy facts, terms and definitions!
Proboscis: tubular mouthparts used for feeding and sucking; an elongated nose or snout. These mouth parts are commonly found on butterflies, moths and elephants.

All THE BUZZ! - Tips, tricks & shortcuts you should know!
Looking to speed up on-site service times? Pre-bait insect monitors and glue boards with bait or attractant beforehand by peeling the cover, placing the bait and replacing the cover.

Got A BUZZ! - These jokes are the bee’s knees!
Q: What do you call a 100 year-old ant?
A: An Ant-ique!

Have an industry related question, tip, joke? Buzz over & drop us a line at membership@nevadapma.org & bee on the lookout for new answers, facts, tips & laughs in each issue of NVFMMA Magazine right here on THE BUZZ.

When submitting questions to THE BUZZ please give as much detail as possible. Questions that are not chosen to print in the magazine may be answered via e-mail. Please provide your first name and city when making any submission; only your first name and city will be displayed. Visit us on the web at www.nevadapma.org.

Airofog USA - Equipment for Professionals made by Professionals.
We are worldwide for our product innovations targeting the end user’s needs. Given our High-Quality products, an extensive R&D department, and superior designs, Airofog is able to compete with Top brands in the industry. Our dedication to new product innovations and creating new and exciting equipment is what sets us apart from our competitor’s. Airofog’s rise and growth has been driven by our sincere aim to provide High quality products to the industry and aid industry professionals in cost savings, all while saving the technicians time and increasing productivity.

Airofog’s core principles are built around developing equipment catered to the needs of operators on the ground. Airofog uses an entirely different system for our design. This unique system is based on the need to reduce parts required in the makeup of the product. This was designed purely from the standpoint of the end-user, fewer parts mean less wear and tear, less maintenance, and enhance ease of operations.

AIRO PRO SPRAYER
- Flat Can Top with extra wide opening for easy fill
- Screw in pump cylinder for tighter fit
- Viton O-Ring pump cylinder assembly
- Larger Stainless steel syphon tube extends to the bottom of the can
- New and improved tip shut off, Eliminates soft seat gasket!
- Screw in C&C Straw

“Foamer Upgrade Kits Available” 9” or 18”

Please email Info@airofogusa.com or Call us at 352-593-5152 to find a distributor near you!
352-593-5152 | www.airofogusa.com
Welcome to Fabulous Las Vegas Pest Expo 2018

Create Your Own Learning Experience with over 20 hours of CEUs to choose from!

Save the Dates Jan 29th & 30th

Keynote Speakers

Reid Ipsen, Ph.D
Dini Miller, Ph.D
Stuart Mitchell, Ph.D
Claudia Riegel, Ph.D
Dan Suiter, Ph.D

Additional Presenters to Include:
Janis Reed Ph.D, Pat Copps BCE, Mike Dogherty, Sylvia Kenmuir BCE, Bert Lopez, Donnie Shelton, Ka Tsu, Jeff Weier BCE & More!

Meet with Industry Leading Vendors
Enjoy Great Food & Live Entertainment!

Monday, Jan 29, 6PM - 9PM
Principal’s Meet & Greet Mixer
In the Exclusive Stardust Suite
Primary Principal & One Guest

Tuesday, Jan 30, 7AM - 9PM
Las Vegas Pest Expo 2018
The Orleans Hotel Ballrooms
Visit NevadaPMA.org for Info

The Orleans
Nevada Pest Management Association
Toys for Tots
EQUIPMENT MAINTENANCE AND REPAIR

Although our equipment and sprayers are made of durable materials, normal use does result in wear and gradual decline in performance. Without routine inspection, maintenance, and replacement of parts, any of your equipment will become inconsistent, leaking, and broken. This type of wear can be non-profitable, result in misapplication, contamination, and the insecticide exposure to the target pests may result in a failure.

The mechanical problems that occur with tank sprayers are usually the result of poor repair and maintenance schedule. A preventative-based maintenance program will eliminate breakdowns and the need to repair it while on the job. If you do not routinely inspect and maintain your equipment it can be costly and dangerous!

Your equipment is a reflection on your professionalism and with proper maintenance and service your sprayer will provide years of dependable service. Remember, routine maintenance is primarily the responsibility of the individual applicator.

Care and Maintenance
• Monthly inspect the pump mechanism, valve, hose, and nozzle. Thoroughly clean and flush the entire system with a detergent and water.
• Annually replace worn parts with the manufacturer-prepared kits and manuals. Other replacement components such as the pump cylinder and shut-off valve are available from the manufacturer.

Cold
When the temperature is below freezing, the water in the siphon tube, hose, and extension may freeze, and the expansion pressure of ice can crack or rupture these parts. Freezing damage can be prevented by relieving pressure in the tank and depressing the valve trigger while elevating the extension to drain liquid back into the tank.

Tanks
Residues from insecticides build up in hoses, valves, and extensions, but especially in tanks. When residues accumulate on internal surfaces, equipment performance decreases. Regular flushing will limit the buildup of pesticide residue, but a thorough cleaning is periodically necessary.

Nozzles
The nozzle orifice produces a specific spray pattern and droplet size. With normal use, the orifice diameter will increase, which increases flow rate. Wear changes the shape of the orifice from oval to round, which will change the spray pattern. These changes occur gradually and may not be noticed. Depending on the amount of use, the type of formulations you usually use, and the cleaning of filters you normally will want to replace the nozzle every 2 years.

Filters and Check Valves
Filters prevent soil and other material from reaching the nozzle, where they can block or abrade the orifice. You’re B and G sprayer has a mesh filter at the end of the extension hose and before the nozzle. These filters must be periodically inspected and cleaned or replaced.

The check valve is at the bottom of the pump tube. Pressure is forced through the pump to build the pressure in the tank. Inspect the check valve periodically for wear and tear and replace annually.

There are many other maintenance areas to check which is why every office has a manufacturers detailed parts list, order number, and instructions for repair. You should also have repair kits which contain gaskets, washers, springs, and other parts necessary to correct common problems.

Shane L. McCoy
Technical Training Director
Wil-Kil Pest Control

Bats - Continued from page 10
activity is due to a lowering of their body temperature. Torpid bats might appear to be sick or dead or might bare their teeth or hiss, a defensive behavior to ward off potential predators. It often takes up to an hour or more for a torpid bat to warm enough to take flight.

You can gently scrape a torpid bat into a can or box, cover the can, allow the bat to warm up in safety, and then release it outside. Never handle bats unless you are wearing leather gloves, since a frightened animal is likely to bite in self-defense.

Signs of bat infestation in a home
• Squeaking, scratching, or crawling sounds in your walls or attic
• Bat droppings inside of house, in the attic, or walls
• Seeing bats fly away from your home at dusk
• Strong urine smell, especially on hot days

Removal from Dwellings
A bat that flies into human living spaces usually is

continued on page 22
THANK YOU TO ALL THE BUSINESSES THAT SUPPORTED THE ASSOCIATION AT THE 2017 PEST EXPO

AiroFog USA
airofogusa.com
Patrick Garrett - (352) 593-5152
airofogusa@airofogusa.com
Allergy Technologies
allergytechnologies.com
Eric Palmer - (408) 720-0038
eric.palmer@allergytechnologies.com
Amvac
amvac-chemical.com
Dean May - (314) 719-8839
deanm@amvac-chemical.com
AP&G
catchmasterpro.com
Scott Baldwin - (214) 760-5874
sbaldwin@catchmasterpro.com
B&G - bgequip.com
John Cotton - (687) 688-5601
jcotton@bgequip.com
BASF
pestcontrol.basf.us
Todd Zhong - (801) 919-6796	
Toddz@ecoraiderusa.com
Eco Raider
ecoraiderusa.com
Rives@controlsolutionsinc.com
Rob Ives - (801) 389-0867
rives@controlsolutionsinc.com
Brio Stack
briostack.com
Derrick Walker - (801) 919-6796
derrick.walker@briostack.com
Bird B Gone
birdgone.com
Bruce Folkins - (801) 392-6915
brucefolkins@xt2000.com
Bayer
bayer.com
Eric Payien - (602) 820-5684
epayien@bayer.com
Bell Labs - belllabs.com
Jeremy Davis - (214) 789-8839
jeremy.davis@belllabs.com
B&G
bgequip.com
mike.goza@pestwest.com
Pest West
pestwest.com
mike.goza@pestwest.com
Eco Raid
ecoraidusa.com
Scott Baldwin - (801) 389-0867
rives@controlsolutionsinc.com
Eco Raider
ecoraiderusa.com
Todd Zhong - (347) 595-5677
toddz@ecoraiderusa.com
Ensystex
ensystex.com
Ed Wilson - (909) 615-5669
ewilson@ensystex.com
FM2 - fm2.com
Alea Pedroza - (714) 833-1911
alea.pedroza@fm2.com
Fuhriman Insurance
fuhrimanins.com
Terry Fuhriman - (208) 327-3400
terry@fuhrimanins.com
key7 Software
keysoftware.com
Helen Baldon - (205) 504-4724
helen.baldon@key7software.com
Knoss Mfg Co, Inc.
knoss.com
Jeff Caufield - (641) 931-0587
jeff@knoss.com
LIPCA, Inc.
lipca.com
Andy McInty - (800) 893-9887
andy.macynty@lipca.com
Liphatech
liphatech.com
Josh Joyce - (714) 262-0355
joycej@liphatech.com
Mattress Safe
mattresssafe.com
Mark Pattinson - (770) 205-5335
mark@mattresssafe.com
MGK
mgk.com
Mark Kenney - (559) 232-8696
matt.kenney@mgk.com
Millward Agency
millwardagency.com
Travis Millward - (801) 216-4545
travis@millwardagency.com
Modern Methods
Art Guzman - (702) 577-6382
guzero@招生.com
Nisus
nisuscorp.com
Scott LaFave - (574) 361-5058
scott@nisuscorp.com
Paragon
paragonpc.com
Steve Diaz - (928) 201-9347
sdiaz@paragonpc.com
Pest West
pestwest.com
Mike Goza - (480) 747-2688
mike.goza@pestwest.com
Piercy Bowler Taylor & Kern
pbt.com
Bill Nelson - (702) 384-1120
bnelson@pbt.com
Pittbull Pest Control
pittbullpestcontrol.com
Joey Tech - (847) 998-6901
jotech@pittbullpestcontrol.com
Protect-A-Bed
protectabed.com
Brian Hirs - (847) 998-6901
brian.hirsch@protectabed.com
Rockwell Labs
rockwelllabs.com
Art Guzman - (702) 577-6382
guzero@招生.com
ServicePro - servise.net
Randy Hames - (614) 553-0227
randy@servise.net
Slingshot
getslingshot.com
Chris Huntsman - (801) 923-3303
chris@getslingshot.com
Syngenta
syngenta.com
Nick Grisafe - (909) 353-5907
nick.grisafe@syngenta.com
Target Specialty Products
target-specialty.com
Robert Snyder - (602) 284-4003
robert.snyder@target-specialty.com
Temp-Air
temp-air.com
Chris Strom - (952) 707-5113
cstrom@temp-air.com
Univar
univares.com
Cal Henrie - (702) 528-4411
cal.henrie@univarusa.com
VM Products
vmnproducts.com
Art Guzman - (702) 577-6382
guzero@招生.com
Western Sage
westernsageinsurance.com
Rick Morache - (702) 735-0198
ricken@westernsageinsurance.com
Workwave
workwave.com
Danielle Panichi - (732) 686-7846
dpanichi@workwave.com
XT2000
xt2000.com
Bruce Folkins - (619) 542-8469
brucefolkins@xt2000.com

USE IT TO

KILL ANTS & COCKROACHES
AND CREATE A SUSTAINABLE TREATMENT PROGRAM.

Ants, cockroaches, crickets, silverfish, slugs and snails all consume Niban bait. The active ingredient in Niban disrupts the metabolic process in the pests’ guts. This effect is specific to insects and gastropods.

Niban has no known resistance to target pests and helps you to create a sustainable treatment program – and that helps you build a sustainable business.

The easy-to-use DominAnt Liquid Ant Bait Station is super attractive to ants and no scissors or knife is needed—just snap open the bait station, lock the lid and place the station...then watch ants flock to it!

LOCK ‘N LOAD

HOLD

SNAP

LOCK

Click open bait station to expose entry ports. Lock and place station in locations where ant traffic is visible.

BBA-6822

100 Nisus Drive • Rockford, TN 37853
800.264.0870 • www.nisuscorp.com
NIBAN®

TARGET PESTS:
ANTS
COCKROACHES
SILVERFISH

APPLICATION:

TARGET PESTS:
ANTS

APPLICATION:

Scatter granular bait around perimeter of structures and near heavy telecastations or entry points. Inside, use Niban in wall voids and under cabinets & appliances.

Remember, always read, understand and comply with the label. Niban, Dominant and Nisus Corporation are registered trademarks of Nisus Corporation ©2017 Nisus Corporation #NPMA-NI-DOM-0817
They know a lot about flavor.

Over time, cockroaches develop more refined tastes. That’s why it’s important to keep your menu fresh. With Advion® Evolution Cockroach Gel Bait, you’ll have a bait that’s proven to increase both feeding and speed of kill.

It’s just the mix to attract even the toughest roaches. To learn more, visit: SyngentaPMP.com/CockroachSolutions

**QUARTERLY NVPMA MEETINGS:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 28, 2017</td>
<td>7-9pm</td>
<td>Orleans Hotel</td>
</tr>
<tr>
<td>November 30, 2017</td>
<td>3-4pm</td>
<td>Orleans Hotel</td>
</tr>
<tr>
<td>January 30, 2017</td>
<td>7am-5pm</td>
<td>Orleans Hotel</td>
</tr>
</tbody>
</table>

Upcoming events are listed online at our website, nevadapma.org

©2017 Syngenta. Important: Always read and follow label instructions. Some products may not be approved for use in all states or counties and/or may have state-specific use requirements. Please check with your local extension service to ensure registration and proper use. Syngenta Customer Center: 1-866-SYNGENTA (796-4368). MW 1LGP7011 07/17
Every so often we are asked by a friend, family member, or acquaintance, “How in the world do you do what you do?” Granted, sometimes I ask myself the same question. We climb into attics, crawl into crawl spaces, squeeze under greasy, grimy kitchen appliances, shuffle behind overgrown bushes on a steamy hot day, allow bed bugs and cockroaches to crawl all over us, and in some cases feed on us. Needless to say our job is not boring.

Pest Management Professionals (PMPs) play a large part in our quality of life in the United States. When we look at history, we look at three huge advances that play big factors on how we live our lives today: Health Care, Sanitation, and Pest Control.

For an example, let’s go back 250 years or so to a little Caribbean Island – Haiti. In 1697, the French founded a colony on the west side of the island, and the Spanish claimed the east side of the island. They flourished and by the 18th century, France became the most profitable sugar producer in the New World thanks to the use of slaves. Fast forward to 1791, the slaves revolted and took control over the island. Thanks to the use of slaves. Fast forward to 1791, the slaves revolted and took control over the island.

In 1794, amongst another slave revolt, the British saw the opportunity to take control of the island with the sole purpose of clearing it of pirates. But in a short four years they had to withdraw due to a little insect-borne disease known as yellow fever. This left control of the island to the Haitians and a de facto ruler, Dominique Toussaint L’Ouverture who declared himself governor general for life. These actions didn’t go unnoticed by Haiti’s ostensible owner, Napoleon himself.

In 1801, Bonaparte implemented a small plan as part of a larger plan. He needed to take control of Haiti as a Port of Call in order to accomplish the larger plan. He wanted to stage an area so he could populate the island to the Haitians and a defacto ruler, Dominique Toussaint L’Ouverture who declared himself governor general for life. These actions didn’t go unnoticed by Haiti’s ostensible owner, Napoleon himself.

In 1801, Bonaparte implemented a small plan as part of a larger plan. He needed to take control of Haiti as a Port of Call in order to accomplish the larger plan. He wanted to stage an area so he could populate the island to the Haitians and a defacto ruler, Dominique Toussaint L’Ouverture who declared himself governor general for life. These actions didn’t go unnoticed by Haiti’s ostensible owner, Napoleon himself.

Napoleon sent 20,000 troops to Haiti to put an end to the pretender. Needless to say, a few short bloody battles and he took control of the island. All his general needed was a few reinforcement and he would be able to accomplish total victory. However there were concerns. Messages were sent. “We have 600 soldiers ill.” “We have 1200 soldiers ill.” All this occurred while fighting the rebel forces. Then in April, the rains came along with yellow fever. By June, the French Army was losing 30-50 soldiers per day. French reinforcements arrived, but the disease consumed 20,000 additional soldiers. By the end of 1803, an estimated 50,000 soldiers, officers, doctors, and sailors died from yellow fever. Only 3,000 men returned to France.

Hence, Napoleon’s largest expeditionary force was utterly destroyed. In turn, Haiti gained its independence, becoming the first independent nation in Latin America and Napoleon decided to sell his empire of the Mississippi Valley to the United States for $15 million dollars (about 3 cents an acre).

What an amazing story, all caused by one species of a little flying insect that can be squashed with one swift slap of the hand. Just think of where we would be if Napoleon had a great PMP at his fingertips to guide him along the way, the advancement in medicines we have today, or if his soldiers had the education about how to eliminate harborage sites. We might all be enjoying French cuisine daily.

For the whole story and other Napoleon Campaigns ruined by insect-borne disease please visit entomology.montana.edu/historybug/napoleon/napoleon.htm, adapted from Peterson, R. K. D. 1995: Insects, disease, and military history: the Napoleonic campaigns and historical perception. American Entomologist.

Bats - Continued from page 16

a young, lost one, and its only goal is to escape. A sudden, panicked exit by humans probably is the worst possible action, as it can cause the bat to hide, making it not only difficult to find but almost impossible to notice if it manages to find a way out on its own. The best action is to keep the flying bat in sight while closing doors to other parts of the house and isolating the mammal to a single room, where no pets or family members are present. If possible, open doors and windows to the outside, so the bat can find its own way of escape. As a further attempt, wait until the bat lands, and approach it slowly. Place a small box or coffee can over the bat, and gently slide a piece of cardboard beneath the container, trapping the bat inside. Then you can release the bat outdoors. Wear leather gloves to avoid being bitten. As a last resort you might be able to catch a bat in flight using a fishing or butterfly net swung from behind the mammal. However, it sometimes is difficult to release bats from netted material. If this occurs, turn the net inside out, and let the bat try to work itself free. Again, avoid handling any bat unless you are wearing leather gloves.

If it wasn’t for mosquitoes, we might all be French.
At the Nevada Department of Agriculture (NDA), our primary purpose (and the reason for all of the regulations that govern our agency) is to protect public safety. As the pest control industry changes, we consistently review and sometimes revise Nevada Revised Statutes (NRS) to achieve that goal.

The 2017 Nevada Legislative session included at least one bill that will have a significant impact on the pest control industry. Assembly Bill (AB) 32 was signed by Governor Sandoval on May 23, 2017 and included a handful of changes to NRS Chapter 555. The most notable change affecting the industry was to NRS Chapter 555.277.

New language of NRS 555.277.2

The provisions of NRS 555.2605 to 555.460, inclusive, and sections 2 to 14, inclusive, of this act, except those provisions relating to a certificate or permit to use a restricted-use pesticide, do not apply to a gardener using hand-powered equipment, devices or contrivances to apply any pesticides of toxicity class III or IV, as classified by the United States Environmental Protection Agency, to any lawn or garden as an incidental part of his or her business of taking care of a lawn or garden for remuneration, if he or she does not advertise or solicit pest control or publicly hold himself or herself out as being in the business of pest control or applying pesticides.

As used in this subsection, “gardener” means a person who owns, operates or is employed by a business that provides routine care of a lawn or garden for a homeowner.

Who is this affecting?

The changes have significantly narrowed the exemption clause for landscapers conducting pest control. Beginning in January 2018, individuals or businesses doing any of the following will be required to obtain a pest control license from the Nevada Department of Agriculture (NDA):
- using anything other than “CAUTION” pesticides (referring to the lowest EPA toxicity class III and IV products)
- advertising pest control or soliciting for pesticide applications (includes bidding for maintenance contracts that involve pesticide applications)
- using powered equipment to apply pesticides
- operating as a commercial pest control business
- conducting any pesticide applications on non-residential properties (includes commercial and public property)
- applying insect or weed killers to sites other than homeowners’ lawns or gardens

Landscapers who conduct pest control will need an “urban and structural” pest control license, which includes one or more of the following categories:
- weed control
- limited landscape pest control
- aquatic pest control (ponds)
- pest control on industrial and institutional property

Individuals or businesses that do not meet any of the criteria above are still exempt from the pest control license requirement.

Contact us

For additional information about regulation changes or to view the full text of AB32, please visit www.leg.state.nv.us. You can also contact us to discuss questions or concerns:

Dr. Ronald Balsamo
rbalsamo@agri.nv.gov
702-668-4545

Dr. Ronald Balsamo manages the Pest Control Program at the Las Vegas NDA office. He has a B.S. in horticulture, a M.S. in plant physiology and a Ph.D. in botany and plant sciences. He has spent his 28-year career in the fields of agriculture and plant sciences.

The Nevada Department of Agriculture (NDA) promotes a business climate that is fair, economically viable and encourages a sustainable environment that serves to protect food, fiber and human health and safety through effective service and education. NDA includes the divisions of Administration, Animal Industry, Consumer Equitability, Food and Nutrition and Plant Industry.
Elm seed bug: a new insect to look out for in Nevada

The elm seed bug (Arocatus melanocephalus) was found for the first time in Nevada this summer. The insect was first found in Idaho in 2009 and then spread to Utah and Oregon. It is expected to eventually spread throughout most of the warmer regions of the western U.S. This bug originates from the Mediterranean region. Aptly named, it feeds on the seeds of elm trees in the genus Ulmus. It is unknown at this time if it will survive on Zelkova, a genus of trees found in southern Nevada that is closely related to elms.

The elm seed bug is a true bug with a typical three-stage life cycle (egg, nymph, adult), four wings and sucking mouthparts. When at rest, the wings form a distinct ‘X’ on the back of the insect with a prominent triangle between the tops of the wings. Elm seed bugs are approximately .25 inches long and are good flyers. They are black and brown to rust colored with light colored banding along the sides of the abdomen.

The insect emerges from hibernation as temperatures warm up in late February to early April. They mate and lay eggs near or on developing elm seeds. The nymphs feed on elm seeds and go through several molts to adulthood. They may also feed on the leaves of elm trees but won’t cause serious damage.

In July and August, the adult insects start seeking out hibernation sites, which is when they may start entering homes in large numbers and become a nuisance. They also will overwinter in cracks and crevices around windows, in siding and in other protected areas. When crushed, they may emit an offensive odor.

To prevent these bugs from entering homes, any of the following steps may be taken:

- Place sticky insect traps around windowsills.
- Collect and destroy any fallen elm seeds to reduce the food source.
- Inspect firewood for overwintering before bringing it inside.
- Spray insecticide barriers around windows, doors and along foundations during July and August (foundation barriers should be three feet wide on the ground and up the foundation for another two to three feet).

Spraying exterior landscapes for this insect may not be effective and could harm beneficial insects and pollinators. If it becomes necessary to use a pesticide, always read and follow the label. Suspect insects may be submitted to any office of the Nevada Department of Agriculture for confirmation.

By Jeff B. Knight, Entomologist Nevada Department of Agriculture

Jeff Knight has served as the Nevada State Entomologist since 1993. The Nevada Department of Agriculture’s entomology program identifies, surveys for and controls native and exotic invertebrate pests, applicable quarantines and regulations.
Drive business with UNIVAR

Getting what you need, when you need it, no matter what — that’s the promise of Univar Environmental Sciences. But our service doesn’t stop at our industry-best product selection. Our experienced team can offer insightful advice at every turn. So get in touch with your local rep and discover how Univar can help you drive business.

Call us at 800-888-4897
or go to PestWeb.com