As we prepare to meet the challenges of spring, it’s difficult to keep up with all the “issues” which confront our industry. Whether it’s the Pesticide Applicator Act sunset bill, pollinator protection, new pesticide labeling, or attacks from the anti-pesticide folks, you can be assured that CPCA and NPMA are constantly on guard protecting the interests of our industry. There is still much to do and all of you can help. Here are a few things that you can do to help protect our livelihood:

1) Contact your State Representatives and tell them to support the Pesticide Applicators Act as presented by DORA. Personal contact from constituents carries tremendous weight, and the antis are very vocal.

2) Be especially careful with each and every application! Assume you are on camera for the 6 o’clock news. With virtually everyone carrying some sort of recording device, we never know when we are the star of the show. Don’t be content with “according to the label.” Go the extra mile to avoid the appearance of misuse.

3) Keep supporting your association, so we can keep supporting you.

As I prepare to give over the reins at CPCA into Kevin LeMaster’s very capable hands, I wish to announce another management change at CPCA. Andy Architect, who has served us as NPMA representative, Board Secretary/Treasurer, and most importantly, Trusted Advisor, has been assigned other responsibilities at NPMA, and we wish him well. Thanks Andy. Andy will be ably replaced by Alexis Wirtz. Alexis is a long time employee of NPMA and we are looking forward to working with her.

Thanks to all of you for your support over these last 2 years. It’s been a Great Run.

Sincerely,
Lee Kreidler
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NEW Maxforce Impact is perfect for today’s bait rotation strategies. Why? It has an innovative white matrix and a novel active ingredient that is specially designed to combat aversion. What’s more? Maxforce Impact has been granted the EPA’s reduced-risk designation for cockroach control. And because it’s Maxforce, you know it’s backed by all the science, innovation, and flat-out effectiveness you expect from Bayer.

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Oriental Cockroach

The oriental cockroach, *Blatta orientalis*, was introduced to Connecticut decades ago and has managed to persist since then. You may not often encounter Oriental cockroaches, but being able to identify and understand them can be quite helpful when you are inspecting a structure. Oriental cockroaches have a uniformly dark brown body and pronotum and an overall greasy sheen to them. Females (1.2") of this robust species are slightly larger than males (1"), but wings are the best way to tell males and females apart; males have ¾ length wings, while females have only wing pads. Given the reduced wings, it is no surprise that oriental cockroaches can’t fly. The length of the wings is a useful feature to help separate this species from other cockroaches that you may encounter.

This species is unique as it prefers to live in cold and damp environments. Oriental cockroaches are usually found at or below ground level and are common in basements, sewers, crawlspaces, and outdoors in dumps, mulch, animal enclosures, and under wood. These environments offer decaying organic matter and biotic slime that these roaches love to eat. They also don’t have a lot of competition from other insects in these cold places. Oriental cockroaches are poor climbers and have a sluggish disposition in general. This may be attributed to the cold and damp environments in which they live, because insect activities levels are generally lower at colder temperatures. In addition to being inadvertently carried into homes in bags and boxes, these cockroaches often gain entry to structures through doors, windows, service ducts, and structural cracks and crevices.

Adult oriental cockroaches usually do not live more than a half year. However, this does not mean that this is a short-lived species. Due to living in a cold environment, development is slow, taking a year or two for an oriental cockroach egg to develop into an adult. Oothecae are reddish brown to black, less than a 0.5" long, have only 8 segments (containing 16 eggs), and are dropped or glued in areas where they are protected by debris.

Oriental cockroaches can harbor a variety of food-borne pathogens, in addition to the usual problems caused by having pests in the home. A combination of moisture reduction, sanitation, harborage removal and chemical control strategies is the best approach to controlling an infestation of these cockroaches. Their preferred habitat may keep them out of sight for homeowners, but be on the lookout for oriental cockroaches when you’re inspecting a structure.

Free Online Pollinator Health Training Now Available for Your Team

Over the last year, the landscape regarding pollinator issues has changed dramatically and honey bees and other pollinators have moved to the forefront. In response, NPMA developed a Pollinator Awareness Training module to give you a baseline of knowledge about pollinators and the issues surrounding them. This online training explores:

- Who are the pollinators and why they matter
- The threats to pollinators (with a focus on honey bees)
- New label language and how it affects exterior applications of neonicotinoids
- How to effectively communicate the facts to your customers

To begin, log-on to the NPMA Online Learning Center at pestworld.learningzen.com and take the Pollinator Awareness Training. This course will take approximately 25 minutes to complete, plus additional time to finish the quiz. This training is free for members, and upon successful completion, you will receive a certificate. Visit My.NPMA PestWorld.org to download customizable pollinator materials.
Evaluation of Fungal Spores Against Bed Bugs

Over the last decade there has been a growing interest in the use of biological control agents against structural insect pests. A group of scientists from University of Maryland-College Park and USDA, led by Kevin Ulrich, recently evaluated the use of fungal spores, *Metarhizium anisopliae*, against the bed bugs, *Cimex lectularius*, in the lab. The entomopathogenic spores, which have been effective against other true bugs, were introduced to the pyrethroid-susceptible bed bugs in a variety of ways, including feeding, contact, and by aerosol spray. Unless humidity levels were exceptionally high (98%), the only delivery method that effectively caused mortality was ingestion, when spores were mixed with a blood product and fed to bed bugs. Ambient humidities in structures are typically much lower than that so the authors of the study concluded that *M. anisopliae* is not an effective control strategy, at least not in the ways tested in these experiments. However, previous studies have shown another fungus (*Beauveria bassiana*) to be effective against bed bugs.

This research was published in the most recent volume of the Journal of Economic Entomology under the title, “Exposure of Bed Bugs to *Metarhizium anisopliae* at Different Humidities.”

CO Senate Approves Bill Extending Pesticide Applicators’ Act

The Colorado Senate recently passed legislation extending the Pesticide Applicators’ Act from July 1, 2015 to Sept. 1, 2024. The bill will now move to the House for further consideration.
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**Warehouse Beetle**

The warehouse beetle, *Trogaderma variabile*, is a very important pest of stored grain products worldwide. Adults are about ¼ inch long, rounded, brownish-black insects, with a variable mottled pattern of lighter brown small scales on their back. It often requires an insect identification expert to correctly separate this species from similar pest beetles, which is why it’s a quarantined pest in many countries.

These tiny beetles feed on a wide range of organic material, from grain, flour, pet food, and dead insects to pasta and even pollen. Warehouse beetles develop from egg to adult in about 35-40 days and are one of the most heat-tolerant of the common grain-inesting pests. Each larva sheds its skin (molts) five or six times, and each cast skin has more than 3,500 tiny setae, which are like tiny, stiff hairs that break off easily and can cause irritation on contact with human skin. Adult warehouse beetles can fly fairly well, so where they are found may not indicate the breeding/feeding source of the infestation. To control this pest, your pest management professional will do a careful survey to detect, and then discard infested foods and other items. When needed, a properly labeled insecticide will be precisely applied to limited target spots near the infestation.

Remember that these pests can thrive in dry pet foods and sometimes even in stored bird seed. Recently developed pheromone products are currently available to pest management professionals to assist in surveillance. Tackling this beetle can be daunting so let the professionals handle proper identification and treatment!

**Norway Rats**

Rats. The word alone conjures up fears of scratching sounds coming from inside walls, filthy alleyways, and disease. The Norway rat, *Rattus norvegicus*, is a large, robust-bodied rodent that is considered the most important pest rat in Connecticut and across much of the world. From nose to tip of the tail, which is short in relation to the body, this rat averages 15” long and weighs 12 ounces. However, there have been Norway rats captured that have reached 19” long and weighed 28 ounces!

Fur ranges in color from reddish brown to dark gray and due to high variation, fur color is not a reliable way to tell one rat from another. Norway rats have small ears but have excellent sense of hearing, tasting, touch and smell, and although their eyes are prominent, Norway rats have a poor sense of sight and are color blind. Rats are what is called ‘crepuscular’ creatures, which means they are active around sunset and sunrise, but not during the day or the middle of the night. Norway rats are exceptional leapers, runners, swimmers, and are capable of climbing pipes, bricks and tree trunks.

Contrary to its name, the Norway rat is originally from eastern Asia but was readily spread by human movement over the last few centuries. The Norway rat is especially adept at living with humans and thrives in urban and rural settings. In fact, the way that a rat behaves is strongly tied to the type of environment in which it is living. This makes it difficult to describe rat behavior in a straightforward way. In general, Norway rats dig burrows into soil to use as safe havens and nesting sites. In a city, these rats exploit cracks, crevices, and holes in streets, sidewalks, and building foundations to use as burrows. Holes as small as 1 inch across may be enough to allow these rats to enter and exit burrows! Norway rats have a fast reproductive cycle; females can produce nearly 40 offspring per year over 4 litters.

Rodents transmit disease, damage property, and cause emotional distress; three important reasons why PMPs are called on to snuff out infestations. Managing rodent infestations is usually a combination of exclusion (sealing up places that allow rats to come in and out of a structure), limiting/removing food (omnivorous diets provide a lot of opportunity) and water (Norway rats must take water daily), trapping, and baiting. Thorough inspections are essential, look for capsule-shaped droppings (0.75–1”), evidence of gnawing and nesting, and even ‘grease’ trails that form in trafficked areas.

Norway rats are intelligent and complex creatures, and successful control efforts require you to be familiar with the intricacies of their biology and behavior and to use your knowledge against them.

**Moisture Issues**

Insects and other pests need the same things we do: food, shelter, and water. Unfortunately, we often provide them with one or all of those things! Eliminating or reducing moisture in and around your home will go a long way in decreasing insect populations. In addition to being a necessary component of life, water also makes wood more attractive to termites and carpenter ants, encourages fungal growth, and serves as a breeding material for mosquitoes and some other types of flies.

Even if you don’t suspect that you might have moisture problems, it’s probably worth investigating.

Check out some of the common possible causes of accumulated moisture around your home.
Mulch and vegetation abutting your house attract pests like earwigs, termites, springtails, and centipedes by holding moisture against your foundation. If reasonable, inspect your gutters and downspouts to see if they are properly installed, clear of debris, and that water is draining away from the structure. If you use a sprinkler system, check to see if sprinkler heads are aimed away from the structure so you aren’t unnecessarily soaking your house and drawing in pests! Two other possibilities include beneath air conditioning units and leaking hoses.

If you aren’t confident in diagnosing or fixing moisture issues, give us a call and we will assess the situation and make sure your property isn’t unwittingly attracting and keeping pests around.

Tick & Mosquito Repellency Awareness

The best way to protect your family from tick and mosquito bites is to stop bites before they happen. In addition to wearing long sleeves and pants and performing tick checks after spending time in tick habitat, many people supplement their protection by using insect and tick repellents. Personally applied repellents have a long history of effectiveness; on the other hand, many other products that claim to repel mosquitoes (like candles), are not very effective. Beginning early this year, you may notice some of the personal insect repellent products you use have a new graphic on them. This repellency awareness graphic (pictured) is a new feature devised by the United States Environmental Protection Agency (EPA) to help consumers better understand how to interpret the claims made by insect repellent manufacturers and better protect themselves.

The EPA now allows companies to include the new repellency awareness graphic on product labels of skin-applied insect repellents if they submit sufficient data that meet current testing protocols and standard evaluation practices that show how long their products are effective at keeping ticks and mosquitoes away. Participation in this new program is voluntary and companies that produce insect repellents do not need to take part. This graphic is intended to help consumers easily identify the repellency time for mosquitoes and/or ticks by featuring a picture the pest and how many hours you can expect them to be repelled after applying the product to your skin. Due to their public health importance, ticks and mosquitoes are the only two pest groups featured in the new graphic. There are many species of ticks found in North America and there are some serious diseases that they can transmit to humans via bites including Rocky Mountain spotted fever, Heartland virus, relapsing fever, and others. Lyme disease, transmitted by the blacklegged, or deer, tick, is certainly the biggest concern and most common tick-borne disease in North America.

Although most common on the East Coast and Midwest, there has been a band of Lyme activity identified on the West Coast. There are over 20,000 identified cases of Lyme annually, which can be treated with antibiotics if diagnosed early on. If you suspect Lyme, look out for the following symptoms and seek out a physician: a rash with a bulls-eye appearance that appears around the site of the bite (though this does not always appear), lethargy, lesions, and potentially chronic arthritis, especially in the knee joints. It’s better to err on the side of caution when it comes to Lyme disease because when left untreated for a while it can cause lifelong problems.

Fortunately, most of the serious mosquito borne diseases present in the world are not a problem in North America. Though we don’t have to worry about malaria or yellow fever, there are other diseases transmitted by our mosquitoes. West Nile virus attracts the most attention, but St. Louis encephalitis, Eastern (and Western) equine encephalitis, and other mosquito-borne diseases do occur in the United States. Within the last year, you may have even heard of two tropical diseases being contracted in Florida (dengue fever and chikungunya). It’s always best to play it safe and protect yourself and your family when you know mosquitoes are out and about!

Paper Wasps

You may notice some unwelcomed guests inside your house in the next few weeks, especially around windows and doors. Wasps! If you observe wasps in your home, you will see that they are most likely sluggish and even a bit disoriented. There is good news and bad news in this situation. The good is that the wasp has no interest in harming you and just wants to find its way outside.

The bad news is, this particular wasp is a queen that already mated in the fall and is looking to start a new colony, probably on the exterior of your home. Of course, it’s not in your best interest to let that happen. Paper wasp nests are very common and pretty easy to identify. They are usually constructed on the underside of eaves, external air conditioners, structural corners and window sills. Paper wasp nests are made from chewed wood pulp, plant matter and saliva and do look like they were made from grey and brown paper. The nest is connected to the structure by a small stalk and hangs down, umbrella-like with many cells visible. Paper wasps are capable of delivering a painful sting and should be regarded as dangerous. Don’t risk your health, or the health of your family.
Introducing PollinatorFacts.org

NPMA understands the importance that all pollinators and specifically bees play in the nation’s food supply chain. Therefore we have made pollinator health an industry priority. With the help of our member companies we have worked diligently to develop training, resources, consumer fact sheets and educational materials to promote bee health in a variety of settings.

PollinatorFacts.org is a new exclusive site for NPMA members to access information that will assist you in understanding national, state and local pollinator issues. Additionally, this site is intended to provide you with resources and information to help educate your employees and your customers.

We hope that you find these resources helpful in your understanding of bee health and encourage you to share with your colleagues. Should you ever have questions in regards to pollinator protection, efforts that NPMA has taken to date or would like to share thoughts and suggestions don’t hesitate to call us at 800.678.6722 or email us at npma@pestworld.org.

Call for Nominations: NPMA Young Entrepreneur Award

NPMA is currently accepting nominations for the annual Young Entrepreneur Award, presented by Rentokil Pest Control, recognizing young entrepreneurs (40 years of age or less) working in the professional pest management industry who have helped create or develop an industry business and/or those who have stewarded a meaningful industry concept to fruition. Visit www.npmapestworld.org for more details on requirements and to submit a nomination.

Save the Date for Academy 2015

July 15-17
Westin Lake Las Vegas Resort & Spa
Henderson, Nevada

Stay tuned for more details!
PWIPM Now Accepting Nominations for the Professional Empowerment Grant

PWIPM is accepting nominations for their annual Professional Empowerment Grant. This grant will be awarded to one female who is interested in advancing or securing a career in pest management. This grant may be used by the recipient to defer costs related to advancing their career or education in the pest management industry. The grant will be a minimum of $1000. It also includes $500 towards travel expenses to attend the National Pest Management Association’s PestWorld in Nashville, TN in October 2015. The Professional Empowerment Grant will be awarded during the Professional Women In Pest Management reception at PestWorld. The successful recipient(s) will be notified by September 1, 2015.

Deadline for submission: August 1, 2015

Minimum requirements:
1. Female currently employed in pest management industry
2. Minimum of 2 years’ experience in the industry

To be submitted:
1. Resume with work experience outlined in the pest management industry
2. Essay (to be no more than 2 pages long (500-1000 words, see below)
3. 2 letters of recommendation (sealed and signed by author)

Essay Questions:
1. What future changes as a female do you anticipate in the pest management industry?
2. How does your practical experience or interest in advancing your career in the pest management industry qualify you for this grant and how will the grant money enable you to further your career?

Letters of recommendation should comment on the student’s goals and motivation and answer the following questions:
1. Does the applicant have a strong interest in the pest management industry?
2. What steps has the applicant taken to prepare/advance her career in the pest management industry?

Finalist Requirements:
The grant recipient will be required to submit an article (no more than 500 words) to PWIPM within 90 days of receipt outlining the benefit of the grant, how the funds will be used and progress being made in her career objectives.

Submit all required documents in one envelope by the August 1, 2015 deadline to:
Dominique Stumpf, CMP
Professional Women in Pest Management
c/o NPMA
10460 North Street, Fairfax, VA 22030
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— Mike Riggins, Owner, Terminator Pest Control

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— Randy Nader, Nader’s Pest Raiders

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Women of Excellence

NPMA is now accepting nominations for the annual Women of Excellence Award, sponsored by Target Specialty Products.

The international honor is open to women across the pest management industry - PMP’s, manufacturers, research organizations, etc. - who demonstrate outstanding leadership and have made notable contributions to the development and growth of the profession, their business, and other women in the industry.

Award nominations are due by Aug. 29, 2015 and the recipient will be recognized at PestWorld 2015, Oct. 20-23 in Nashville. Visit www.npmapestworld.org to view requirements and to submit your nomination.

Saving America’s Pollinators Act Reintroduced in U.S. House of Representatives

On March 4th, Representatives John Conyers, Jr. (D-MI) and Earl Blumenauer (D-OR) reintroduced the Saving America’s Pollinators Act of 2015 H.R. 1284, which requires the Administrator of the Environmental Protection Agency (EPA) to suspend the use of certain insecticides, known as neonicotinoids, until the agency can review the registration and declare that such insecticides do not cause adverse effects upon honey bees and other pollinators.

The bill also requires the Secretary of the Interior, in coordination with the EPA Administrator, to regularly monitor the health and population status of native bees and identify the scope and likely causes of unusual bee mortality.

H.R. 1284 is essentially the same bill as H.R. 2692, which was introduced in the 113th Congress by Rep. Conyers and Rep. Blumenauer on July 16, 2013. H.R. 2692 was referred to the Agriculture Committee and in August of 2013 H.R. 2692 was referred to the Agriculture Subcommittee on Horticulture, Research, Biotechnology and Foreign Affairs, which has jurisdiction on FIFRA related legislation. No further action was taken on H.R. 2692 during the 113th Congress.

H.R. 1284 has been referred to the House Agriculture Committee, and is expected to be referred to the Subcommittee on Biotechnology, Horticulture and Research, which will have appropriate jurisdiction.
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Complete and return application with payment to:
Colorado Pest Control Association  
10460 North Street, Fairfax, VA 22030  
Phone: (800) 678-6722 • Fax: (866) 957-7378 (PEST)  
www.cpcapestworld.org

Dues to CPCA are not deductible as a charitable contribution but may be deductible as an ordinary and necessary business expense.

If you have any questions about your membership, please contact CPCA at (703) 352-6762 or e-mail colorado@pestworld.org.