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- PVCA Academic Award Information

**From Mosquito**

“In the modern world, mosquitoes are aids in their competition for territory by our airplanes, ships, trains, and trucks. As transportation makes the world smaller and much more interconnected, we are required to track those species that are vectors of disease and do our utmost to keep them out.”

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## Dogs Being Trained to Help Wage Battle Against Bedbugs:

Submitted By Andy Kyle

Story found on FOX-NEWS.COM May 13, 2007

Gainesville, Fla.—She’s 9 lbs of curious canine topped by a few tuffs of hair. Part Chinese-crested terrier, part who-knows-what. Bedbugs fear her.

Nudie is one of the dogs being trained to detect the biting critters by Peruyero’s J&K Canine Academy in High Springs in collaboration with University of Florida entomologists.

Absent from the U. S. for so long that some thought they were a myth, bedbugs are back with a vengeance. The National Pest Control Association reports that exterminators who were getting one or two calls a year are now getting that many a week—roughly 50 times the number of calls. That puts dogs like Nudie in the front lines of defense against the blood-sucking critters that come out at night to feed.

She was among some 20 dogs being tested for their termite and bedbug-detecting accuracy during the Southeast Pest Management Conference on the University of Florida campus. “We’ve been working to try to make sure that there are quality dogs out there to detect termites, and now bedbugs,” said Phil Koehler, an entomology professor with UF’s Institute of Food and Agricultural Sciences. “Both those pests are very difficult to detect in structures,” he said.

Nudie works for treats from her owner and handler, Jose “Pepe” Peruyero, who found her at the Lake City animal shelter. She scrambles across a mattress in a demonstration of her bug-sniffing accuracy.

“Find your B’s, find your B’s,” Peruyero commands. Within seconds, Nudie is pawing furiously at a spot on the bed. She found her “B’s” - as in bedbugs. She gets a handful of kibble, a hearty “Good girl” from Peruyero and a kiss on her scruffy head.

J&K Canine Academy has been training termite-sniffing dogs, usually Brace Beagles, for three years in cooperation with UF entomologists. Now the school has begun training dogs to detect a resurgent population of bedbugs.

Dogs aren’t a silver bullet when it comes to finding bedbugs, Peruyero says, but they have skills humans don’t.

Peruyero explains it like this: A human can walk into a kitchen and know—through sense of smell—that stew is cooking on the stove. But a dog’s sense of smell is so sharp that it can be trained to distinguish a stew made with carrots from one without. “I tell people they’re buying a nose with four legs to carry it,” Peruyero says. “They love to eat, love to smell. It’s what they live for.”

Experts say the resurgence in bedbugs can be attributed in part to the use of less powerful pesticides since DDT was banned in the 1960s. The critters were all but wiped out in the U. S. until several years ago, when they began migrating here from other countries, health officials say. Now they’re found in all 50 states, according to the National Pest Control Association. They’re found in hotels or motels, but also in private homes and apartments. They’ve even been reported on cruise ships.

While they can be unsettling, and leave a reddish welt behind when they bite, experts say bedbugs do not pose a serious health risk. The return of the bedbug has been good news for Peruyero and the dogs he trains. Peruyero says that he fields sales calls from California to Australia. “The bedbug training is sort of like hitting the Lotto,” the trainer said. “Everybody’s interested now.”
What’s Happening in Region 1: Submitted by Ben Russell

Black fly control has, to date, been pretty successful in the Delaware and Schuylkill River watersheds. We’ve had to conduct a few ground based Bti applications on the Manatawny Creek in the Pottstown/Douglassville area. The program has received no complaints, although there were some high adult numbers noted along the Manatawny Creek for a brief time. Water levels on the two main river have remained low all summer; this has allowed DEP to conduct treatments when and where needed.

Mosquito control activity in South-eastern PA has been moving at a brisk pace with DEP staff putting their new ULV spraying equipment to work all across the region. No virus activity has been noted in the SE as of yet, but county and state staff are conducting preemptive strikes to try to reduce some of the high mosquito populations in the region.

Mosquito control staff have been doing monthly aerial larviciding around the Philadelphia International Airport, at the Philadelphia Water Dept. Biosolids Plant in SW Philly, and the PWD NE Wastewater Treatment Plant property. This work has been conducted around the 7th of each month. DEP and City staff have done two treatments with the state contractor, Helicopter Applicators, so far this summer. Adult mosquito hotspots have been noted around Croydon where DEP staff aided Bucks Co. in adulticiding operations on two occasions. Delaware Co. has been real hot as DEP has conducted four adult sprays there. These operations have been in Upper Chichester Twp, Concord Twp, and Thornbury Twp. (all in western Delaware Co.). Philadelphia staff have been doing weekly adulticiding events on their own at the Biosolids facility and N.E. WWTP.

What’s Happening in Region 5

Submitted By Leah Lamonte

The West Nile Virus Program is off to a good start after our annual kickoff meeting that took place at the end of April in Westmoreland County. The Beaver County program had to especially hit the ground running in April as *Ochlaritatus dorsalis*, the pale marsh mosquito, continues to be a nuisance in a portion of their county. The area of concern for this mosquito in Beaver County is located on privately owned industrial property that unfortunately borders a small residential and farming community. *O. dorsalis* thrives in low pH habitats and is common to the Pacific Northwest. While not a known WNV carrier, dorsalis is an avid human and mammal biter. Beaver County has combined control efforts with Adapco (contracted by the industrial company) to reduce adult and larval numbers of dorsalis. While Adapco has been treating in the large industrial site, Beaver County has been conducting adult spraying events as well as larval treatments in surrounding residential areas. Since this process began in early May, the dorsalis population has shown a significant decrease, which they hope will remain the case throughout the rest of the summer.

Allegheny County focused their control efforts this spring on 40 sites historically known to breed floodwater mosquitoes that create a nuisance for residents. Allegheny County’s Catch Basin Program will take place again this summer to treat thousands of catch basins within the City of Pittsburgh. This spring, Allegheny County also trained local municipal workers in pesticide application enabling them to treat catch basins within their own municipalities.

From the beginning of mosquito season, Indiana County has collected consistently high numbers of *Culex restuans* in gravid traps. As of date, Indiana County has caught the second highest number of mosquitoes in the state with over 20,000 mosquitoes caught and half of these being *C. restuans*. They have increased surveillance and conducted numerous barrier and ULV treatments in the areas with consistently high trap counts. Fortunately, Indiana County’s new purchase of an ATV and Zephyr ULV/Barrier Unit has greatly increased their control efficiency.

The West Nile Virus Program is off to a good start after our annual kickoff meeting that took place at the end of April in Westmoreland County. The Beaver County program had to especially hit the ground running in April as *Ochlaritatus dorsalis*, the pale marsh mosquito, continues to be a nuisance in a portion of their county. The area of concern for this mosquito in Beaver County is located on privately owned industrial property that unfortunately borders a small residential and farming community. *O. dorsalis* thrives in low pH habitats and is common to the Pacific Northwest. While not a known WNV carrier, dorsalis is an avid human and mammal biter. Beaver County has combined control efforts with Adapco (contracted by the industrial company) to reduce adult
What's Happening in Region 2:
Submitted by Cliff Pristas

WNV has not been isolated in any mosquito or bird samples submitted for testing as of Tuesday July 10, 2007. Larval control work for the counties continues for artificial container species, i.e. tire piles, WWTP, catch basins.

Speaking of catch basins, the Lackawanna County WNV program has completed the treatment of ~1,000 catch basins in the city of Scranton, previously identified as holding water. A comprehensive survey started in the fall last year used GPS technology to map and label all catch basins in the city onto a laptop computer. Those basins holding water during the survey were physically marked as well with an orange colored spray painted dot. Basins were remarked as needed during the time of the treatment. Altocid XR Ingots were used for this control project.

“A Mister” Cliff and the magic wand
A ULV calibration workshop was held on June 5th 2007. at Lackawanna WNV Program’s maintenance bldg. A truck mounted London Fog unit and two London Aire colts were calibrated. Staff from Wayne Wyoming and Lackawanna’s WNV program were attended the event. Special thanks to Ted Bean and Brian Bruno (ADAPCO Inc.) for sponsoring this workshop and conducting the calibration testing.

What’s Happening in Region 3
Submitted by Christian Boyer

Region 3 has reported the first positive mosquito pools in the state for 2007. Two positive mosquito pools were collected from Blair County. The first positive was from a pool of Culex restuans that was collected on May 31st. This is the earliest a mosquito sample has tested positive since the inception of the West Nile virus program. The 2nd positive from Blair County was collected on June 12th and was also from a pool of Culex restuans.

Through the second week of July, 1,810 pools have been tested comprised of 44,769 total mosquitoes. The majority of the specimens tested have been Culex mosquitoes. Due to the high numbers of Culex mosquitoes that have been collected throughout the region, many counties, along with DEP, have been conducting adulticiding operations to keep those populations at the lowest levels possible to reduce the chance of amplification of the virus.

There have only been 5 dead birds submitted for testing in region 3. All of these are either waiting to be tested or have been negative. The drop in dead bird submissions can be linked to the change in protocol that birds to be tested must be either raptors or of the Corvid species only.

Doug Orr provided the following information about the Black Fly program. The first treatment of the season was conducted on May 3rd. To date the Susquehanna River has been treated 8 times and the Juniata River 6 times as well as periodic treatments of tributaries to both rivers.

Late May and early June proved challenging due to heavy algal loads which reduced mortality in the Susquehanna River. Now, extremely low flows are creating problems by reducing the carry distance of the Vectobac. Regardless of these problems, adult black fly populations have been held at low levels throughout the summer.
As the self-appointed Safety Guru for The Pennsylvania Vector, I have made it my job to bring you issues concerning safety that will make you think. I often list operations or procedures that should be reviewed because they might have become seemingly routine. Most of these topics come about as a result of one of our fellow Vectorites making a mistake. You might say we highlight these mistakes to avoid others. Sometimes, these misadventures tend to be somewhat humorous; others may make us cringe. Either way, if we bring it to light, it may save someone else the possible embarrassment or pain.

As I mentioned, most times I draw on the experiences of others. Today, I get to provide the topic from a recent personal experience. Ouch!

Have you ever wondered why they continue to put warnings and cautions on equipment that you KNOW will only be used by trained, qualified, mature adults? I think it’s to remind us that we need to pay attention to these cautions even when we think we’re all grown up. Here again, when we become complacent and just do things out of routine, we put ourselves in a position to get hurt. Let me give you an example of what I’m talking about.

During a break between late evening ULV operations, I got in a hurry to reach for a container inside the truck cap and ended up receiving a 2nd degree burn on the inside of my upper arm. You see, even though the truck cap has 3 windows, I decided I could reach the item over the top of the tailgate mounted Zephyr instead of walking around to the side. Did you know that it is possible to grill flesh on the muffler of a Zephyr ULV machine? It is! When that sign says HOT, it means HOT!!!! It does not take a lot of time to severely burn yourself; my contact with the muffler was very quick and the damage was done instantly.

My wounds are healing and the lesson has been learned. You might even say (you knew it was coming) it’s been burned into my brain. (Sorry, couldn’t resist.) Always think before you act: make safety your first thought.
The northwest region of PA has received very little rain this spring. As a result, the mosquito numbers found in light traps have been significantly lower than previous years. Mosquito control activities have focused on Culex species and other “container breeders” which are frequently collected in gravid traps. As of 7/13/2007, West Nile Virus (WNV) has not been detected in the northwest region this season.

DEP’s WNV Biologists now have an all-terrain vehicle (ATV) to conduct control activities in areas that are inaccessible to most motor vehicles. The ATV will also be a useful surveillance tool.

The Ohio River Drainage Contract of the PA Black Fly Suppression Program conducted the first spray of the season on May 14th, 2007. Contractor Helicopter Applicators, from Gettysburg, PA, has completed a total of seven spray events in Western Pennsylvania this summer.

Black fly treatments began on July 12th along Kiskiminetas and Conemaugh Rivers in Indiana and Westmoreland Counties. Spray operations on the Clarion River have expanded to include a segment of the lower Clarion River between Pinny Dam and the river mouth.

### Buzzed Honeybees Act Like Drunk Humans:

The following story was recently published in The Inspector (the monthly newsletter of The Pennsylvania Pest Management Association). I think you’ll enjoy it.

“Alcohol affects bees and humans in similar ways—it impairs motor functioning along with learning and memory processing,” said Julie Mustard, study co-author and post-doctoral researcher in entomology at Ohio State University. Researchers gave honeybees various levels of ethanol, the intoxicating agent in liquor, and monitored the ensuing behavioral effects of the drink—specifically how much time the bees spent flying, walking, standing still, grooming and flat on their backs, so drunk they couldn’t stand up. The researchers also measured levels of ethanol in the bees hemolymph [blood].

Not surprisingly, increasing ethanol consumption meant bees spent less time flying, walking and grooming, and more time upside down. The appearance of inebriation occurred sooner for bees given a larger dose of ethanol. Also, blood ethanol levels increased with time and the amount of ethanol consumed.

This study is preliminary—researchers simply wanted to see what effects ethanol had on honeybee behavior. In the future, however, they hope to use honeybees as a model for learning more about how chronic alcohol use affects humans, particularly at the molecular level.

“On the molecular level, the brains of honeybees and humans work the same. Knowing how chronic alcohol use affects genes and proteins in the honeybee brain may help us eventually understand how alcoholism affects social behavior, memory and behavior in humans, as well as the molecular basis of addiction.” Mustard said.

I’m signing up for the human part of the research!
GRANDMA'S CURES: Submitted by Len Howell

This is like Hillarie's Helpful Hints
Keep This Handy On The Fridge.

Did You Know that drinking two glasses of Gatorade can relieve headache pain almost immediately--without the unpleasant side effects caused by traditional "pain relievers."

Did you know that Colgate toothpaste makes an excellent salve for burns.

Before you head to the drugstore for a high-priced inhaler filled with mysterious chemicals, try chewing on a couple of curiously strong Altroids peppermints. They'll clear up your stuffy nose.

Achy muscles from a bout of flu? Mix 1 Tablespoon of horseradish in 1 cup of olive oil. Let the mixture sit for 30 minutes, then apply it as a massage oil, for instant relief for aching muscles.

Sore throat? Just mix 1/4 cup of vinegar with 1/4 cup of honey and take 1 tablespoon six times a day. The vinegar kills the bacteria.

Cure urinary tract infections with Alka-Seltzer.
Just dissolve two tablets in a glass of water and drink it at the onset of the symptoms. Alka-Seltzer begins eliminating urinary tract infections almost instantly--even though the product was never been advertised for this use.

Honey remedy for skin blemishes.
Cover the blemish with a dab of honey and place a Band-Aid over it. Honey kills the bacteria, keeps the skin sterile, and speeds healing.

Works overnight.

Listerine therapy for toenail fungus.
Get rid of unsightly toenail fungus by soaking your toes in Listerine mouthwash. The powerful antiseptic leaves your toenails looking healthy again.

Easy eyeglass protection...To prevent the screws in eyeglasses from loosening, apply a small drop of Maybelline Crystal Clear nail polish to the threads of the screws before tightening them.

Smart splinter remover...Just pour a drop of Elmer's Glue-All over the splinter, let dry, and peel the dried glue off the skin. The splinter sticks to the dried glue.

Hunt's tomato paste boil cure...Cover the boil with Hunt's tomato paste as a compress. The acids from the tomatoes soothe the pain and bring the boil to a head.

Balm for broken blisters...To disinfect a broken blister, dab on a few drops of Listerine...a powerful anti-septic.

Vinegar to heal bruises...Soak a cotton ball in white vinegar and apply it to the bruise for 1 hour. The vinegar reduces the blueness and speeds up the healing process.

Kills fleas instantly...Dawn dish washing liquid does the trick. Add a few drops to your dog's bath and shampoo the animal thoroughly.. Rinse well to avoid skin irritations. Good-bye fleas.

Rainy day cure for dog odor...Next time your dog comes in from the rain, simply wipe down the animal with Bounce or any dryer sheet, instantly making your dog smell springtime fresh.

Eliminate ear mites...All it takes is a few drops of Wesson corn oil in your cat's ear...Massage it in, then clean with a cotton ball. Repeat daily for 3 days. The oil soothes the cat's skin, smothers the mites, and accelerates healing.

Quaker Oats for fast pain relief...It's not for breakfast any more! Mix 2 cups of Quaker Oats and 1 cup of water in a bowl and warm in the microwave for 1 minute, cool slightly, and apply the mixture to your hands for soothing relief from arthritis pain.

Spraying: It's either this or gnat

Submitted by Andy Kyle

-- In mankind's constant tinkering with nature, doing the right thing has at times come back to bite us - literally. Take for example the story of the black fly. The pesky gnats with a knack for forming distracting swarms have aggravated residents of Pennsylvania since before it was even called Pennsylvania, according to the state Department of Environmental Protection. But because fly larvae develop in fast-moving, low-level waterways, increasing waterway pollution culled their numbers. Efforts to clean up waterway pollution in recent decades have had the unintended effect of increasing the population of black flies, but the state has a way to bite back. If every county with waterways buys in, we all benefit from the black fly control program. Discuss participation with your county commissioners.
Jeopardy Scores BIG at Conference:
Submitted by Greg Molter

It’s not every day that you have fun while learning, but members attending the PVCA annual conference did. The Wednesday night banquet was followed by a slightly different venue than we’ve followed in past years. Instead of a guest speaker, members from Penn State Cooperative Extension provided an unusual but educational experience: We played Jeopardy!

Granted, several folks wondered off possibly thinking this would rate somewhere between watching grass grow and visiting the dentist, but personally, I think they missed a lot of fun and a great time.

Louise Bugbee and Norm Conrad put together an outstanding list of questions and answers. The ballroom was divided into 2 teams (red & blue), with Louise and Norm walking the floor with microphones. Mike Hutchinson carried out the duties as judge and Andy Kyle kept score.

When the dust cleared and the red team had successfully won the day, each member of the winning team received a pack of sticky buns of their very own. Look for a repeat of fun and excitement in the future.

Norm, I’ll have innovators for $400.

DID YOU KNOW? A Taste of Insect Trivia

(From 1001 facts about insects)

Did you know: Insects live everywhere there is warmth and moisture. Many of the five million or more species have specialized habitat requirements. They can only live in particular places, and easily become extinct when humans change or destroy their surroundings.

Did you know: Insects have many ways to protect themselves from predators. One method is the act of camouflage. Many utilize blending coloration to become one with the plants around it. Others use disruptive coloration to break up their shape.

Did you know: Some insects have very strong parental instincts. Some species of the shield bug stay with their eggs and young nymphs to protect them. If touched, the parent produces a powerful smell, giving these bugs a somewhat fitting nickname; “Stink Bug”.

Did you know: The African grasshopper has broad hind wings that allow it to glide for long distances. Locusts are a type of grasshopper that fly in huge groups when they need new food. Sometimes as many as 100 million locusts fly together for hundreds of miles.

Did you know: The largest order of insects known to man is the beetle. More than 400,000 species have been described. The runner-up is (next issue)

ANNOUNCEMENT - JOB VACANCY

date issued: July 12, 2007

Craven Co. Health Dept.
position title: Vector Control Mngr
date available: July 17, 2007
salary range: $41,574 - $68,041
position status xx permanent temporary xx full-time ____part-time
hours/days: Monday Friday (8am to 5pm)
Description/qualifications required:
graduation from a four (4) year college or university with a bachelor’s degree in biology, entomology, or related field with 20 semester hours of entomology and an additional 10 semester hours of course work in a physical or biological science. Preferred that applicant possess a public health pesticide applicator’s license, however, license may be obtained after hire. Continual re-certification of public pesticide applicators’ license will be required.

Essential job functions: develop, direct, manage and coordinate the activities of a surveillance driven mosquito/pest management program. Position is responsible for thorough data collection and record keeping, accurate entomological identification of species and application of larvacides and pesticides. Individual will be responsible for providing education and training programs and the generation of educational materials. This position is in environmental health. position #437-71-201 (282-1)

Apply to: employment security commission, 1305 Simmons street, New Bern, North Carolina 28560
application deadline: open until filled
depart contact person: Deborah H. Barmann phone #: 252-636-4920
Contact Ray Silverthorne at (252)636-4936 for more information
WASHINGTON — Birds that once flourished in suburban skies, including robins, bluebirds and crows, have been devastated by West Nile virus, a study found. Populations of seven species have had dramatic declines across the continent since West Nile emerged in the United States in 1999, according to a first-of-its-kind study.

The research, to be published Thursday by the journal Nature, compared 26 years of bird breeding surveys to quantify what had been known anecdotally. "We're seeing a serious impact," said study co-author Marm Kilpatrick, a senior research scientist at the Consortium of Conservation Medicine in New York.

West Nile virus, which is spread by mosquito bites, has infected 23,974 people in confirmed cases since 1999, killing 962, according to the Centers for Disease Control and Prevention. But the disease, primarily an avian virus, has been far deadlier for birds. The death toll for crows and jays is easily in the hundreds of thousands, based on the number dead bodies found and extrapolated for what wasn't reported, Kilpatrick said.

It hit the seven species — American crow, blue jay, tufted titmouse, American robin, house wren, chickadee and Eastern bluebird — hard enough to be scientifically significant. Only the blue jay and house wren bounced back, in 2005.

The hardest-hit species has been the American crow. Nationwide, about one-third of crows have been killed by West Nile, said study lead author Shannon LaDeau, a research scientist at the Smithsonian Migratory Bird Center in Washington. The species was on the rise until 1999. In some places, such as Maryland, crow loss was at 45 percent, and around Baltimore and Washington, 90 percent was gone, LaDeau said.

While crows are scavengers and often disliked, they play a key role in nature by cleaning up animal carcasses, LaDeau noted. Researchers will next look into what species benefit from the disappearance of crows. Researchers noted the die-offs came in patches, with many in some places and none in others.

Maryland appeared to be the epicenter of bird deaths, though that was partly because the data were not as good from New York, where the virus first hit, LaDeau said. Chickadees, Eastern bluebirds and robins in Maryland were 68 percent, 52 percent, and 32 percent below expected levels in 2005. Tufted titmouse populations in Illinois were one-third of what they were expected to be.

"It tends to be more suburban ar-
The Dreaded Black Fly

Submitted by Ben Russell

Michigan. While most of us associate black flies with the north country, in some form or another they appear from the Arctic to the tropics.

Like mosquitoes, their primary food source is nectar and plant juices. Only the females bite and this is to attain the blood meal required for ovarian development. Mosquitoes quite benignly slip a sucker straw into a pore to tap blood but the black fly is not so dainty. They chew a hole in your hide, inject anticoagulant and lap up the pooling blood. You cannot feel the bite at the time of the deed. The first inkling you’ve been had is when you discover a trickle of dried blood. Sometime later the swelling and itching begins. The degree of this reaction depends on the susceptibility of the individual. To some it doesn’t amount to much more than a mosquito bite. Others, especially with multiple bites, puff up like a balloon and experience agonizing itching and burning. I’ve heard of lost or stranded people actually dying from black fly bites. When swarming by the millions black flies can and do kill animals and rarely even humans. Small animals, both pets and wild, can become weak from loss of blood. Death can occur from vast numbers of bites causing acute toxemia, meaning actually poisoned to death by the injected anticoagulant. Death can also come from anaphylactic shock, an allergic reaction causing respiratory and blood pressure problems. This is the same thing experienced by those allergic to bee stings, though it takes huge numbers of the less potent black fly bites for this to occur.

While mosquitoes are a product of polluting, stagnant water, black fly larvae must have very clean, flowing water to develop. In fact, the presence of black flies is a good indicator of a healthy stream. Until the last few decades I never saw a black fly here in southern Michigan. I first started to notice them in the 1980s. Since then they have become more and more common to where in some locals they are a nuisance. That is testimony that our streams are becoming less polluted. Black flies are only active during the day. High DEET bug repellants help to a degree but are not entirely effective. Black flies like to dine in seclusion, like under your collar, shirt and pant cuffs, behind and in your ears and in your hair. It helps to tuck your pant cuffs into your socks, cinch down your sleeve cuffs and wear a hat that covers your ears. Also hit these areas heavy with bug dope. Though it is often disputed, in my considerable experience they (and mosquitoes) are drawn to dark clothing. Wear neutral tones like medium greens, dark khaki and such. Carpe diem.

Larry Lyons writes a weekly outdoor column for Leader Publications. He can be reached at larrylyons@verizon.net
Mosquito control: advancing in fight against WNv

Submitted by Andy Kyle

MATT JOYCE
The Associated Press
Fri May 11, 2007 12:48 EDT

IRVING, Texas (AP) _ With the arrival of spring rainstorms and steamy weather, mosquito-control workers in Texas and across the nation are gearing up for another round in the ongoing battle against West Nile Virus.

The mosquito-borne virus, which usually doesn't cause serious illness but killed 177 people in the United States last year, has led health departments to change their methods for fighting mosquitoes and monitoring viruses.

In Dallas County, for example, the health department once checked dead birds and bled chickens to test for infections, but now monitors mosquito populations and possible virus problems using Global Positioning System tools.

"It's reawakened our public, our politicians and us to the importance of mosquito control," Texas A&M University entomologist Jim Olson told North Texas health department workers this week.

Texas, where the virus first appeared in 2002, led the nation in West Nile deaths last year with 32. The state's 354 human cases was second only to Idaho's 996, according to the Centers for Disease Control and Prevention.

West Nile was detected in the United States in 1999 in New York. Mosquitoes spread the virus by contracting it from infected birds and then biting other birds or animals. Among mammals, humans and horses are the most commonly sickened.

The virus spread across the lower 48 states by 2005, but it's too early to say where it will be most active this summer. Two human cases have been reported this year, both in Mississippi, according to that state's health department. The Texas health department reports one horse case this year, in Collin County.

"We can certainly guess that people are going to be at risk in all parts of the U.S.," said Emily Zielinski-Gutierrez, a behavioral scientist at the CDC Division of Vector-Borne Infectious Diseases in Fort Collins, Colo.

In Texas, the cold winter slowed reproduction of two mosquito species mostly responsible for West Nile in the state, Olson said. Recent flooding also disrupted the carrier species, although it triggered an abundance of other annoying mosquito species.

"Now we're going into bird-nesting time, which is the prime buildup time for the bird and mosquito populations," he said. "The juvenile birds are the most vulnerable to mosquitoes and lack any kind of immunity, and the virus explodes in them."

Olson said a recent Texas A&M survey covering Houston and Bryan found that the public is aware of West Nile prevention measures, such as eliminating stagnant water, but that hasn't translated into action.

"John Q. Citizen thinks if they pay their taxes, then you ought to get rid of the mosquitoes," he said.

That's the task facing Scott Sawlis, vector control supervisor for Dallas County, which last year confirmed 59 human cases of neuroinvasive West Nile _ the form of the disease that can cause meningitis or encephalitis.

Dallas County opened a mosquito-testing lab in 2004 and is working with local municipalities to implement weekly mosquito collection at 30 permanent traps. The information will be posted on the Web. Sawlis said the program will build an index of species and locations as well as enable the county to act quickly with insecticide.

Zielinski-Gutierrez said West Nile brought renewed government and academic resources to mosquito-control that make programs like Dallas County's possible.

But the multitude of factors affecting West Nile outbreaks makes it difficult to predict if the disease will ever be controlled. The virus' eight years in the U.S. isn't enough time for reliable patterns, she said.

"West Nile is not going to go away," Zielinski-Gutierrez said. "As it fades from the headlines and it's not as present, the challenge is going to be to maintain the resources ... to handle mosquito control effectively."

On the Net:
Texas Department of Health West Nile page, http://www.dshs.state.tx.us/idcu/disease/arboviral/westnile/
Dallas County health department, http://www.dallascounty.org/department/hhservices/westnilevirus.html
Rats run wild in KFC-Taco Bell in NY

Submitted By Louise Bugbee

New York, Feb 24:

New Yorkers are used to seeing rats where they catch their trains — not where they buy their burritos. About a dozen rats were having a grand party Friday in a locked KFC/Taco Bell restaurant, scampering around the floor, playing with each other and sniffing for food as they dashed around tables and children's high chairs.

Word spread after a TV crew discovered the rat infestation Friday morning and filmed it through a window of the Greenwich Village building.

Health inspectors arrived, and the parent company for KFC and Taco Bell, Yum Brands, Inc., was again forced into damage-control mode a few months after enduring an E. coli outbreak.

The restaurant was not open when the rats were spotted. The company said construction in the basement on Thursday appeared to have stirred up the rodents.

"This is completely unacceptable and is an absolute violation of our high standards," Yum Brands said in a statement.

Rats have long been a problem in densely populated New York City. They are frequently seen scampering through subway tunnels, rooting through trash, dashing across parks and burrowing into the walls of apartment buildings.

Greenwich Village tends to be a happy home for them because of its combination of older buildings and a tangle of subway lines converging just below street level.

Still, it is rare to see so many rats congregating in one place in such public view.

The city Department of Health had inspectors at the site on Friday for hours, and by midday had posted a sign that read "CLOSED."

"Today, this establishment had serious unsanitary conditions," said Carol Feracho, a senior health inspector. "There were issues with vermin throughout."

She said the infestation was "coming from the building," with "openings" that allowed the vermin to enter. She provided no other details.

There was no answer at the phone number displayed in neon on the store window below the words, "We Deliver." Health Department records list the franchise owner as ADF Fifth Operating Corp, agency spokeswoman Sara Markt said.

The owner could not be reached for comment, despite numerous efforts.

The franchise owner "is actively addressing this issue," Yum Brands' statement said, adding that the restaurant will remain closed until the problem is resolved.

Joel Cohen, who lives in the building next to the restaurant, had a graphic view of the situation.

"This place is a disaster," said Cohen, who works in real estate. "They throw their rubbish in the doorways. It's loaded up with food in bags that are not tied, and the rats have eaten through the bags."

Taco Bell sales have slumped since last year's E. coli scare, in which more than 70 East Coast customers became ill. Federal officials said lettuce was the most likely source, and the company has changed suppliers.
WD 40 Who knew!!!!

How would you like to wake up one morning and find that someone has sprayed red paint all over your nice new white pickup truck? Seems that’s what happened to someone and his neighbor told him to get his WD-40 and clean it off. It removed the unwanted paint beautifully and did not harm his paint job that was on the truck. Impressive! WD-40 who knew?

Water Displacement #40. The product began from a search for a rust preventative solvent and degreaser to protect missile parts. WD-40 was created in 1953 by three technicians at the San Diego Rocket Chemical Company. Its name comes from the project that was to find a “water displacement” compound. They were successful with the fortieth formulation, thus WD-40. The Corvair Company bought it in bulk to protect their atlas missile parts.

Ken East (one of the original founders) says there is nothing in WD-40 that would hurt you.

When you read the "shower door" part, try it. It’s the first thing that has ever cleaned that spotty shower door. If yours is plastic, it works just as well as glass. It’s a miracle! Then try it on your stovetop... Voila! It’s now shinier than it’s ever been. You’ll be amazed.

Here are some of the uses:
1) Protects silver from tarnishing.
2) Removes road tar and grime from cars.
3) Cleans and lubricates guitar strings.
4) Gives floors that ‘just-waxed’ shine without making it slippery.
5) Keeps flies off cows.
6) Restores and cleans chalkboards.
7) Removes lipstick stains.
8) Lubricates noisy door hinges on vehicles and doors in homes
9) Untangles jewelry chains.
10) Removes stains from stainless steel sinks.
11) Removes dirt and grime from the barbecue grill.
12) Keeps ceramic/terra cotta garden pots from oxidizing.
13) Removes tomato stains from clothing.
14) Keeps glass shower doors free of water spots.
15) Camouflages scratches in ceramic and marble floors.
16) Keeps scissors working smoothly.
17) Lubricates noisy door hinges on vehicles and doors in homes
18) It removes black scuff marks from the kitchen floor! Use WD-40 for those nasty tar and scuff marks on flooring. It doesn’t seem to harm the finish and you won’t have to scrub nearly as hard to get them off. Just remember to open some windows if you have a lot of marks.
19) Bug guts will eat away the finish on your car if not removed quickly! Use WD-40!
20) Gives a children’s play gym slide a shine for a super fast slide.
21) Lubricates gear shift and mower deck lever for ease of handling on riding mowers.
22) Rids kids rocking chairs and swings of squeaky noises.
23) Lubricates tracks in sticking home windows and makes them easier to open.
24) Spraying an umbrella stem makes it easier to open and close.
25) Restores and cleans padded leather dashboards in vehicles, as well as vinyl bumpers.
26) Restores and cleans roof racks on vehicles.
27) Lubricates and stops squeaks in electric fans.
28) Lubricates wheel sprockets on tricycles, wagons, and bicycles for easy handling.
29) Lubricates fan belts on washers and dryers and keeps them running smoothly.
30) Keeps rust from forming on saws and saw blades, and other tools.
31) Removes splattered grease on stove.
32) Gives floors that ‘just-waxed’ sheen
33) Lubricates prosthetic limbs.

>34) Keeps pigeons off the balcony (they hate the smell).
35) Removes all traces of duct tape.
36) Folks even spray it on their arms, hands, and knees to relieve arthritis pain.
37) Florida’s favorite use is: "cleans and removes love bugs from grills and bumpers."
38) The favorite use in the state of New York: WD-40 protects the Statue of Liberty from the elements.
39) WD-40 attracts fish. Spray a LITTLE on live bait or lures and you will be catching the big one in no time. Also, it’s a lot cheaper than the chemical attractants that are made for just that purpose. Keep in mind though, using some chemical laced baits or lures for fishing are not allowed in some states.
40) Use it for fire ant bites. It takes the sting away immediately and stops the itch.
41) WD-40 is great for removing crayon from walls. Spray on the mark and wipe with a clean rag.
42) Also, if you’ve discovered that your teenage daughter has washed and dried a tube of lipstick with a load of laundry, saturate the lipstick spots with WD-40 and re-wash. Presto! Lipstick is gone!
43) If you sprayed WD-40 on the distributor cap, it would displace the moisture and allow the car to start.

Well, so goes the list of things WD 40 can do for you. Now, I’m not here to tell you this is all true, but do a little research and find out for yourself. If it works, let us know and we’ll print your testimony.
Our annual meeting is not too far distant so it is time to start thinking about students to nominate for this award. Please consider students (undergrad or grad) who are working in an area related to vectors/vector control. Perhaps you have a student intern working in your lab—consider nominating her/him. Nominations are due to me by August 31, 2007. The following is a summary of the motion passed at the 1998 Annual Meeting:

**PVCA Academic Award for Student Research in Vector Control**

At least two organizations/societies in Pennsylvania recognize with an annual award the efforts of outstanding students in biology and entomology. The Commonwealth of Pennsylvania University Biologists and The Entomological Society of Pennsylvania both have yearly recognition awards for the outstanding student in Biology or Entomology from the state of Pennsylvania. Students are nominated by members of the respective societies, an awards committee uses established criteria to evaluate the nominees, and the outstanding student for the year is chosen by the committee. The student is notified by the committee and the award is presented at the annual meeting of the society. The student attends the meeting and presents a summary of his/her research to the body of the society during the meeting. Travel, room, and meal expenses for the student are offset by the society. A certificate of recognition and a cash award of $200 are presented to the student during a banquet.

There exist at the colleges, universities and governmental agencies throughout Pennsylvania graduate and undergraduate students who excel in research projects dealing with vector control or vector control related studies. Their results are often incorporated into industrial, governmental, and private programs. Generally the works of these students go unrecognized except perhaps at the local level-university department and school awards, county/city recognition, local service groups, etc.

We propose that beginning in 1998 The Pennsylvania Vector Control Association establish an award for the outstanding Pennsylvania student conducting research in vector control or vector control related areas during the previous/current year. A student may be nominated by any member of PVCA. A summer mailing to all PVCA members will solicit nominations. Nominations will be due to the awards committee chair by August 31 each year. The awards committee will review the nominations and by majority vote select the outstanding student. By September 15 the president of PVCA will notify the student and invite him/her to the annual meeting. The student will be required to be in attendance the initial day of the meeting and give a presentation of research at the meeting. The student will be recognized at the evening banquet and awarded a certificate of recognition and $300. PVCA will cover travel, room for one night, and meals for the student.

The PVCA Awards Committee will consist of five members appointed by the PVCA Executive Committee. Length of service on the Awards Committee will be three years with opportunity for reappointment.

This is our opportunity to recognize the work of some truly outstanding students.
NOMINATION FORM FOR PENNSYLVANIA VECTOR CONTROL
ASSOCIATION STUDENT RESEARCH AWARD

GENERAL INFORMATION

NAME OF NOMINEE_______________________________________

ADDRESS________________________________________________

____________________________________________________________________________

E-Mail__________________PH: ________________

EDUCATIONAL BACKGROUND

INSTITUTION_______________________________________________

MAJOR__________________________________ UNDERGRAD GRAD

GRADE PT. AVERAGE_______________

SPECIAL HONORS, AWARDS, ETC.

Please describe your nominee’s research contribution(s) to the area of vector control. What is the significance of this research?

PVCA MEMBER’S NAME ______________________________

ADDRESS______________________________________________

____________________________________________________________________________

PHONE NUMBER ______________

Application deadline date: August 31, 2007.

Please return application to: J. G. Humphreys

Department of Biology, Indiana University of Pennsylvania

Indiana, PA 15705 or e-mail me. jghumfrz@auxmail.iup.edu
INDUSTRY MOURNS LOSS OF MARK LACEY

WILMINGTON Delaware—

Dr. Mark Lacey, a well known pest control industry author and speaker who most recently worked for Liphatech, passed away unexpectedly on April 30. He was 58.

Lacey is perhaps best remembered as a frequent speaker on a wide variety of topics at local, state, regional and national meetings and as author of “The Urban IPM Handbook”, co-author of the PCT Field Guide for the Management of Urban Spiders and the PCT Field Guide for the Management of Structure-Infesting Beetles (Volume II), as well as numerous technical articles in the industry trade magazines.

Since 2003, Lacey has served as district sales manager of Liphatech’s northeast territory, which includes Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and West Virginia.

“Mark was virtually an icon in the industry and a tremendous asset to the company; he will be missed,” said Liphatech CEO Carl Tanner. “He was an extremely knowledgeable professional—and scientist at heart who loved the pest control industry. Aside from his expertise, he was very well liked and well respected, not to mention the fact that he was an all-around wonderful person. We’re saddened by this loss and our thoughts and prayers are with his family and friends.”

Added Al Smith, director of marketing and business development, Liphatech, “Mark meant a great deal to Liphatech. When we hired Mark, we looked at his extensive pest control background and experiences and decided that he was the right person to move into that position and hit the ground running. It will be a significant loss for us and for our customers in the northeast territory.”

Prior to joining Liphatech, Lacey was a technical consultant for the National Pest Management Association (2001-2003). He also was a former technical director for Paragon Professional Pest Control and was president of the International Pest Management Network (IPM), a consulting firm based in New Castle, Delaware. He also was a member of the American Entomological Society, Pi Chi Omega, Entomological Society of America and American Arachnological Society. A 1971 graduate of the University of Delaware, Lacey earned both his master’s and Ph.D. in entomology from Cornell University.

Dr. Mark Lacey
1949—2007

Lacey is survived by his wife of 34 years, Rebecca C. Lacey; mother, Virginia M. Lacey, of Wilmington, De.; brother, Bruce C. Lacey, of Glasgow, De.; sister, Gail L. Toppin and her husband, Bill, of Wilmington, De.; mother and father-in-law, Ruth and Kenny Carter, of Wilmington, De.; and nieces and nephews. He was preceded in death by his father, Harold B. Lacey.

Contributions may be made in his memory to the Richardson Park United Methodist Church, Mathes and Maryland Avenues, Wilmington, De., 19804; or to the Delaware Humane Society, 701 A Street, Wilmington, De. 19801.

EDITORS NOTE:

Dr. Mark Lacey was no stranger to the Pennsylvania Vector Control Association. He had been a guest speaker for our group several times. His topics varied and his presentations always entertained. Listening to Mark speak gave you a sense of participating without becoming directly involved.

In 2003, Mark spoke to us regarding the IPM approach to rodent control. His presentation of the information was outstanding: I can still see the thousands of mice over-running that barn. Makes you wonder about whole-sale grain sales operations.

In 2006, Mark again joined us as a guest speaker. This time the topic was dealing with the health significance of Urban Pests. Although his time allotted was short, Mark was still able to reach that part of my brain that actually learns stuff. I once again came away from his presentation with having absorbed something.

I had hoped that we would once again hear Dr. Mark Lacey address our annual conference, but that was not to be.

Many of you knew Mark through your professional connections. You have lost a respected colleague whose void will be felt throughout the industry. Some of you knew him as a personal friend; remember him fondly and he will forever be with you.

In closing, I want to offer our heartfelt condolences to the family of Doctor Mark Lacey on behalf of the entire PVCA membership.
PICTURES FROM THE MEMBERSHIP

2006 Conference - Greg Rokavec

2006 Conference - Dr. Jerome Klun

2007 “Nifty After 50” Health Fair

2007 ADAPCO Calibration Event

2007 MAMCA “Who Done It?”

2007 Law Day in Columbia County
Space reserved for vendors: 1/8 page free to sustaining members, otherwise 1/8 page $50, 1/4 page $75, 1/2 page $100 and full page $200. Contact Andy Kyle for more information regarding advertising in our newsletter.

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SOMETHING TO THINK ABOUT:

Did you attend MAMCA?

Don’t you wish everyone did?

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Mosquito control starts just below the surface.

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The Pennsylvania Vector is an informational newsletter, written and produced for the purpose of providing the members of the PVCA with updates on activities conducted by this group and to highlight innovations made in the field of vector control. Articles herein have been reviewed for content and to the best of my knowledge contain the most current information available. The Pennsylvania Vector will be mailed to organization members, with past editions available in PDF format on the PVCA web site at www.pavectorcontrol.org.

Items posted in “The Pennsylvania Vector” are submitted by the general membership and staff. Posting herein allows for the widest dissemination to all members of the organization. Should a listed event be cancelled or rescheduled (after publication), revisions will not be printed or mailed to the membership as part of the Newsletter process. These revisions should be submitted as soon as possible by email or fax to the PVCA web site.

Organizations are encouraged to submit Newsletter articles and can do so by contacting this office. Cut-off dates: Feb 15th, Jun 15th, and Oct 15th.

Publications will be issued March, July, and November.

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**PRESIDENT’S Corner**

Mike Hutchinson

Please remember to keep your calendar clear November 14-16 for our annual conference. We have been working hard to bring you another quality meeting that should be both enjoyable and informative.

Here are some of the topics we intend to include on the agenda this year: WNV panel with patients who have contracted the disease, 3-4 black fly related talks, the effect of co-infection with other pathogens on the transmission of arboviruses, alternative mosquito repellent research, WNV county program reports, toxoplasmosis rates in PA bobcat populations, mosquitoes in stormwater re/detention basins, Buruli ulcer infections, Bt mode of action, efficacy trials of a new mosquito adulticide, tick-borne diseases, rodent control and the Jeopardy game.

If you have a topic that you would like to hear more about or if you would like to give a presentation at the conference, please contact me and we’ll try to get you into a slot. Also, for those of you who plan ahead, the 2008 conference will be held at the Nittany Lion Inn October 28-30. See you soon!

Mike

717-346-8265; mhutchinso@state.pa.us

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**EDITOR’S Corner**

Greg Molter

Well, another fiscal year is behind us and as we move forward we find many of our colleagues narrowly escaping a well deserved but unwanted, unpaid vacation. I’m glad to see everyone has survived the budget crunch of 2007.

Time for us to start thinking about the upcoming PVCA Annual Conference. Our timeline for this years event will be November 14th through the 16th in State College. It is shaping up to be a very informative conference, with many knowledgeable presenters on hand. You won’t want to miss it.

I hope you’ve noticed this edition is a bit larger than normal. If you haven’t, I’d like to point out 3 very import pages. First, on page 15 is a notice of the passing of a very good friend and colleague of the PVCA: Dr. Mark Lacey. Second, pages 13 and 14 have information necessary for you to submit individuals for the PVCA Academic Award. The cut-off for submissions is listed as August 31st but contact Dr. Humphreys to be sure. His email is: jghumfraz@auxmail.iup.edu

Until November, be safe, keep busy and pray for rain: the ground needs it and it sure wouldn’t hurt job security.