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Greater Chicago Pest

# **GCPMA**

**Management Alliance** 

### **PRESIDENT'S MESSAGE:**

#### Serving Pest Management Professionals Since 2004

**11/13/2020 • Winter 2020:** By the time you receive this, hopefully it will be 2021. We will have all woken up in a normal world, as if 2020 was just a bad dream. But as I write this on Star Date Friday, November 13th, I feel like we are barreling into one of the most difficult times periods yet. That being said, I often have been accused of being a glass half empty kind of lady. Regardless, I hope that all of you are happy and healthy!

The good news is that most of us in the industry still had pretty solid year and were able to keep our business' thriving, employees safe, and customers pest free. GCPMA put on 2 solid virtual seminars with crazy, awesome participation and speakers. We are so proud of all of you attending, staying engaged, and supporting GCPMA. Be on the lookout for our next virtual seminar in February 2021.

Also be on the lookout for your membership renewals. Remember that if you want GCPMA to keep bringing the best show in town to your doorstep, we need support from our members to keep us going.

I also wanted to let everyone know that this will my last term as President of GCPMA. For those of you who are getting choked up, please hold your tears for the end in the so enjoyed my last 4 years leading this organization. I am eternally grateful for the loyal GCPMA board members through the years who stood by my side. I am insanely lucky to have be President of the best PCO Association in the darn country. The new President will be announced by the time you get this and I am confident they will continue to steer the organization through the pandemic to the other side!

I will leave you with my last corny quote and it is one of my most favorite! *"So do all who live to see such times, but that is not for them to decide. All you have to decide is what to do with the time that is given to you."* 

Sara McGuire

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The

# **TURKEY VULTURES**

BY JANE PEIFER, Ampest Exterminating & Wildlife Control



The other day I was so excited because I thought I saw a bald eagle. Turned out it was a turkey vulture. Turkey vultures are big and eagle-like in appearance, especially in flight. With a body length of nearly 3 feet and a wingspan of about 6 feet across, it's easy to see why people often mistake a turkey vulture for an eagle or large hawk.

MILD Life

A closer look will reveal a bird much different looking than eagles and hawks. Their heads,

when compared to that of eagles', are smaller and featherless. The feathers on their wings appear black from a distance but up close are dark brown with a paler underside of the flight feathers giving it a twotoned pattern.

The gravity defying flight-style of these birds is accomplished by rocking their bodies back and forth as they catch the updrafts upon lengthy wings. As well, while eagles soar with wings stretched horizontally from their bodies, turkey vultures hold their wings in a "V" as they soar in ascending circles above the landscape.

Turkey vultures have no feathers on their head and that's a good thing considering they eat carrion (the decaying flesh of dead animals). Dining can be a pretty messy business for them. As one would expect, a rotting carcass contains a host of bacteria and parasites, therefore, having a naked head is just the head to have when probing the insides of decaying carcasses for meals. Feathers would be difficult to keep clean, while on the other hand, a featherless head is easy to keep clean. The naked red head of the adult turkey vulture resemble those of turkeys, hence the name. Turkey vultures are also one of very few species of birds that possess a highly developed sense of smell. Large nostril openings within their beaks are a clear sign of its amazing ability to detect its favorite and almost exclusive food item: carrion. By soaring above forests and fields, turkey vultures are able to detect carcasses of animals by both sight and scent. The flesh of an herbivore is much tastier so turkey vultures often pass on carcasses of cats, dogs, and coyotes. They will, however, eat such carcasses in the absence of more desirable food.

#### SOME INTERESTING FACTS ABOUT TURKEY VULTURES:

• The turkey vulture is related to the stork, not to any birds of prey.



 A close inspection of their feet reminds one of a chicken instead of a hawk or an eagle. Their feet

are useless for ripping into prey, but the vultures have powerful beaks that can tear through even the toughest cow hide. Turkey vultures are the only scavenger birds that can't kill their prey.

- They feed by thrusting their heads into the body cavities of rotting animals.
- Turkey vultures have an extraordinary sense of smell. They have been known to be able to smell carrion from over a mile away, which is very unique in the bird world. The turkey vulture has the largest olfactory (smelling) system of all birds.
- Vultures prefer meat as fresh as possible and won't eat extremely rotted carcasses. They can smell carrion only 12-24 hours old.
- In the early morning hours, you may see turkey vultures sunbathing in a tree with their wings spread out. This is done to increase their body temperature after the cool night.
- Researchers have determined that turkey vultures can travel at up to 200 miles in a day.
- Turkey vultures average 3-foot tall with a 6-foot wingspan. In spite of their large size, they only weigh about 3 pounds.

- Turkey vultures have been known to live up to 24 years. The average age is estimated to be around 20 years.
- Turkey vultures help clean up the environment by eating the flesh off dead animals before it rots and causes disease.

Though perhaps not as majestic or as beautiful as the eagle or osprey, no other bird matches the turkey vultures' elegant flight and superior senses. As Edward Abbey, the American author and environmentalist, once wrote of the turkey vulture; *"Let us praise the noble turkey vulture: no one envies him; he harms nobody; and he contemplates our little world from a most serene and noble height."* 

If your business serves and sells to pest management operators in the Chicagoland area, **ADVERTISE IN THE NEXT ALLIANCE QUARTERLY EDITION!** Visit gcpma.com for more information and to reserve your spot.

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### GCPMA SCHOLARSHIP GRATITUDE



September 30, 2020

Greater Chicago Pest Management Alliance Attn: Scholarship Committee

Dear Friends of my Grandfather:

I had no way to address this accept this way because he always brags about this group and how wonderful everyone is in it. He always said there were no guarantees that I was going to get a scholarship, but when Keith gave me a call, it could not have come at a better time (I just got the bill for my books). Growing up was never easy for me being raised by only my mom, but my dad was always there for me and my grandpa Pietrucha always stressed family as being the most important thing on the planet. He never knew I was considering his and my grandma's alma mater, so they were pretty emotional when I was not only accepted but got one of the best scholarships awarded for academics and sports. I apologize for taking so long to acknowledge this wonderful gift you have given me but I have discovered that college is a lot tougher than high school and really a challenge during this pandemic. And being in Wisconsin we are sort of on lock down. I hope the program continues so that others can experience the honor of getting the scholarship money I received. It was so cool to get that call. I think grandpa thought he won it more than I did. Anyway, thank you again, it will be put to good use because despite the great school scholarship I received there are a bunch a little things that are out there. Thank you all for this kindness. It will never be forgotten.

Sincerely,

Andrew J Pietrucha, Freshman St. Norbert College De Pere WI

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| <ul> <li>Translocates to reach pest harborages</li> </ul>  | $\checkmark$             |              |           |
| <ul> <li>Increases gel bait consumption in adult female cockroaches<br/>and nymphs</li> </ul>            | $\checkmark$             |              |           |
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# REDUCE CALLBACKS THIS WINTER WITH ZOËCON IGRS

CONTRIBUTED BY ZOËCON

Due to the ongoing pandemic, restaurants in some regions are being forced to close their doors again for the winter season. As a result, the demand for winter pest control in this normally reliable market could dip significantly. With this loss, however, comes an opportunity for pest management professionals to shift their focus towards residential pest control.

With customers spending so much time in their homes, from working remotely to having a full house with virtual schooling on the rise, the need to keep their homes pest free is a bigger priority than ever before. The biggest challenge with residential pest control this year is customer wariness about coming into direct contact with pest management professionals due to the ongoing pandemic. When you pair this with their fear of having callbacks and repeat visits, it's vital for PMPs to educate customers on insect growth regulators (IGRs) for sustained insect control throughout the winter. At Zoëcon, we offer solutions that provide the long-lasting control your customers desire, with our Gentrol<sup>®</sup> IGRs that offer up to 120 days of control and our Precor family of products that deliver 7 months protection from flea emergence. **Learn how you can adjust in these unprecedented times and educate your customers on residential pest control and the importance of IGRs.** 



KITCHEN AND BATHROOM PEST CONTROL

Share these tips with your customers to help ensure a pest-free kitchen and bathroom this winter.

#### KITCHEN AND BATHROOM PESTS:

- Ants: Examine edges of counters, seams and baseboards. Look along the edges of toilets, sinks and pipes.
- **Cockroaches:** Look in small areas close to water and food sources. Check underneath sinks and objects in dark, damp places.
- **Small flies:** Breed in drains, rotten vegetable matter and disposal lines.
- Stored product pests: Check in packaged and spilled food items, wool and organic debris.
- **Silverfish:** They are unable to climb on smooth surfaces and are often found trapped in sinks and tubs. Look for infestations in baseboards, plumbing jets and humid areas.
- Springtails and other occasional invaders: need moisture to survive, so they congregate by sinks and tubs.

For effective and long-lasting pest control that reduces callbacks while protecting your customers, treat these areas with Gentrol® IGRs. Recommended products include Gentrol® IGR Concentrate, Gentrol Point Source, Gentrol® Aerosol and Gentrol® Complete Aerosol.



Share these tips with your customers to help ensure a pest-free living room and bedroom this winter.

#### LIVING ROOM AND BEDROOM PESTS:

- Ants: Check around bed seams, baseboards and the edges of desks and dressers.
- Bed bugs: Examine the narrow elements of headboards, mattresses, box springs, bed frames and nightstands. They can easily spread horizontally and vertically, so check for infestations in adjacent rooms.
- Fleas: Look where pets spend a lot of time, such as under pet beds or near doors. Larvae and eggs seek protection in carpet fibers, under cushions and in cracks and crevices.
- Cockroaches: Search cracks and crevices, vents and sources of moisture

For sustained protection against these living room and bedroom pests, treat these areas with Precor and Gentrol® IGRs. **Recommended products include Precor® 2625 Premise Spray and Gentrol® IGR Concentrate.** 



Share these tips with your customers to help ensure a pest-free garage this winter.

#### GARAGE PESTS:

- Cockroaches: Enter garages through garage doors and drains. They often hide around building foundations.
- Spiders and occasional invaders: Typically found in different areas throughout garage

For quick knockdown and lasting control, treat these areas with insecticides and Gentrol® IGRs. Recommended products include Essentria® Contact Spray or ExciteR™ combined with Gentrol® IGR Concentrate.

The development of IGRs meant that products could exist that didn't depend on direct toxicity or attacking an insect's central nervous system to be effective. IGRs offer PMPs an alternative with a soft environmental impact that ends infestations by controlling insects at the larval stage. They can be used with insecticides for complete control and elimination of costly callbacks while helping reduce face-to-face interactions between clients and PMPs during these unprecedented times.

# WINTER SERVICE

BY GREG STROHL, Pest Management Supply

Winter service should be an indoor service. It is your opportunity to make a personal connection with your customers. Take a little extra time to build the relationship and loyalty between you and your customer. You will take better care of your customer if you know them, and your customer is more likely to keep your service if they know, and like you.

Winter allows you the time to take special focus on the interior of the property, identifying issues that property owners may not have noticed. There should be a special focus on inspection, so that the property can be best prepared when the warmer weather kicks in and the insects become active.

Rodents and spiders tend to be common problems indoor, during the cold months. Knock down and remove webs. Monitor for rodent activity in the garage, basements, crawlspaces and attic spaces. Go the extra mile by inspecting all of these areas. Not only will these inspections help you to identify issues, this will also build your customer's confidence in your abilities. Another critical treatment that provide during winter is an attic treatment. Many pests, including cluster flies, box elder bugs, stink bugs and carpenter ants hide out and remain dormant in attics until warmer weather arrives. Dusting an attic during the cold season will help to keep these insects out of living spaces and avoid having to deal with them as spring approaches.

Prior to your winter service you should educate your customer on the reasons you need to return to their homes for a winter service. This will assure you some winter income and help to minimize pest problems in early spring.

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2 Prescott, C. V., El-Amin, Vusa, and Smith, R.H. "Calciferols and Bait Shyness in the Laboratory Rat". Proceedings of the Fifteenth Vertebrate Pest Conference 1992. Paper 64. Whisson, Desley, "Rodenticides for Control of Norway Rats, Roof Rats, and House Mice". University of California Cooperative Extension, Poultry Fact Sheet No. 23, 1996.

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# **CORONAVIRUS:** CALLS TO SHUT DOWN 'DIRTY FUR TRADE'

BY: HELEN BRIGGS, BBC Environment correspondent - www.bbc.com



Tens of millions of animals are farmed for their fur around the world, including raccoon dogs.

Mink have contracted coronavirus, adding to the list of animals known to be at risk of catching the virus. Mink at two fur farms in the Netherlands tested positive for Covid-19 a week ago.

And last month, it was revealed that lions and tigers at a New York zoo had caught the disease from their keepers.

### "Coronavirus could be "catastrophic" for endangered wildlife and we must act now to protect them," said Dr Peta Hitchens of the University of Melbourne.

This includes thorough regulation of wildlife trade and trafficking, as well as protection of ecosystems where human encroachment and destruction *"has resulted in increased interactions between us and wild animals"*.

It's not surprising that mink have been infected, she added. The list of mammal species infected during the 2003 Sars (severe acute respiratory syndrome) outbreak numbers at least 16, including mink, palm civets, fruit bats, several species of horseshoe bat, red fox, wild boar, raccoon dog, and domestic cats and dogs.

Officials in the Netherlands believe mink contracted the illness from farm workers and the farms have since been put into quarantine.

The creation of new mink farms was banned there in 2013, while existing mink fur farms have until 2024 to close.

Animal rights organization Peta has written a letter to ministers calling for the farms to be shut down immediately: "Allowing mink farms to maintain business as usual for nearly four more years – in the face of a global crisis stemming from animal exploitation – would be inexcusable from the perspective of both the risk posed to humans and the harm inflicted on the mink themselves."

Animal protection charity Humane Society International, which campaigns for a global end to the fur trade, has warned of the risk in other countries, where tens of millions of mink, fox, raccoon dogs, chinchillas and rabbits are farmed.

Claire Bass, executive director of Humane Society International/UK, said in addition to animal suffering, the potential for disease spread is another reason for all fashion companies to go fur-free and for governments to shut down *"this dirty trade"*.

### "One of the lessons we must learn from Covid-19 is that we cannot carry on pushing animals to the limit of their endurance without serious consequences for both animal and human health," she said.

"We urge the Netherlands and other countries in the process of phasing out fur farming to speed up their industry closures, and countries yet to commit to bans, including China and Finland, to do so now."

A spokesperson for the British Fur Trade Association said: "The case in the Netherlands demonstrates the efficiency of fur farming bio security measures in Europe and the rigorous controls that are in place. The Dutch authorities confirm that there is no further spread of the virus and that the risk of onward transmission is negligible."

According to a 2016 report released by the Chinese Academy of Engineering, 75% of China's wildlife trade is dominated by fur production with animals farmed for their fur, such as raccoon dogs, foxes and mink, often ending up at wildlife wet market.

SOURCE: www.bbc.com/news/science-environment-52535075

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- Wesley Stapelman, Spray Plus Pest Control

"I have been doing pest control for over 45 years and I have had the opportunity to use Fipronil-Plus-C from last September on fire ants ,cockroaches, spiders, crickets and stink bugs Fipronil-Plus-C remind me of the old time products when you sprayed the bugs they were dead and you had very few call backs. I have applied this product at all three use rates with great success on all rates: less call backs, longer lasting with lower toxicity. I recommend Fipronil-Plus-C to all my colleagues in the pest control industry. You will be glad you tried it." - Bob Fahnholz, A-1 Pest, Phoenix AZ

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- Austin Burns, Burns Pest Elimination, Phoenix



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## SARASOTA BEEKEEPER UPCYCLING POLITICAL SIGNS FOR SWEET PURPOSE

BY: KIMBERLY KUIZON, FOX 13 NEWS

SARASOTA, Fla. — They're the byproduct of a long and divisive election year. Now, political yard signs will serve a sweeter purpose and it's causing quite a buzz.

"I saw the politician signs and I said, 'What a great opportunity,''' said Alma Johnson, who owns Sarasota Honey Company. "I'd rather use those than having to go buy corrugated plastic from Home Depot and add more to the landfill too."

Johnson is now using political signs to keep her bees safe from the elements and predators, like beetles.

"They don't care if it's a Trump sign or a Biden sign. They hold no loyalty to any party," she said.

Sarasota Honey Co. is asking for plastic political signs. The foam ones don't do them any good. It's spaces in the plastic signs that can help out the bees.

"We cut these political signs into squares. We seal one side and fill it with mineral oil and apple cider vinegar

and it draws the beetles into the holes and they can't get out because of the slipperiness of the oil and they die. It's a natural way to treat the beehives and we don't have to use chemicals," Johnson explained.

On top of that, the signs can be used to keep bees warm when the temperature drops below 60 degrees.

"They won't take off because a particular sign is underneath them, they don't care. They just want to stay nice and warm just as you like to stay nice and cozy without any bugs in your house," she said. Nancy Regan, no relationship to our 40th president, made a stop to drop off signs she found.

"It was an environmental way to take care of somebody else's trash," said Regan.

All party signs. Left, right, and in-between will be used for the greater good.

### "It is a way of bringing people together and guess what, the byproduct of that coming together is a sweet life, honey," said Johnson.

Sarasota Honey Co. is located at 2227 University Pkwy in Sarasota. They ask that you bundle yard signs and drop them off during business hours.

Call (941) 726-8755 for more information.

**SOURCE:** *www.fox13news.com/news/sarasota-beekeeper-upcycling- political-signs-for-sweet-purpose* 





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Brian Smith from Veseris with Mike Dirks of Dirks Pest Management



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### THESE MANATEE COUNTY PUPS HAVE A NOSE FOR COVID-19

BY: CATHERINE HAWLEY, FOX 13 NEWS

MYAKKA CITY, Fla. — A Manatee County company is training dogs to sniff out COVID-19. The Myakka City training facility is the home of BioScent.

"Right now we have 20 dogs that are in training," explained Heather Junqueira. She is putting the beagle's super-sensitive snouts to work. According to Junqueira, Canines can use their powerful sense of smell to detect bombs, drugs, and even diseases like cancer.

Since March, this group has been training to sniff out coronavirus. It started with some research, a pilot study using COVID-19 positive nasal testing swabs that no longer have a live virus.

#### "We did a double-blind study and tested the dog's accuracy rate on those," Heather said. "And they were hitting at a 98% accuracy rate."

The dogs do not smell the actual virus; they are picking up the body's reaction to being infected with COVID-19 that has a distinct scent. The beagles are now training to detect coronavirus in human sweat.

"People use 4x4 gauze pads under their arms, and then they go into double zip-lock bag and come into us," said Heather. Then the learning starts. The gauze with sweat from a COVIDpositive patient is placed in a canister. Other canisters in the room are filled with potentially confusing alternatives. The hounds first smell the air, then sit down indicating they found the positive sample.

"It's a very strong signature odor and they were able to pick it up really easily," Heather said.

Multiple studies have been done showing dogs can indeed be trained to find COVID-19 by scent, and a few international airports already have dogs on duty screening passengers.

BioScent's research is now being funded by 27 Health. The goal is to use the beagles to flag folks who are infected with coronavirus in large crowds like concerts and sporting events. Heather hopes BioScent's first group of pups will be ready to do the important work by the first of the year.

**READ THE FULL ARTICLE & WATCH THE VIDEO:** *fox13news. com/news/local-group-training-covid-sniffing-dogs* 



### NAVY EXPERIMENTING WITH 'CYBORG LOCUSTS' TO FIND EXPLOSIVES

**BY BRIAN NIEMIETZ - NEW YORK DAILY NEWS** *americanmilitarynews.com* 

### CALL THE SWAT TEAM!



Bomb-sniffing "cyborg locusts" could be the next wave in national security, according to military news agency Stars and Stripes.

Washington University researchers, funded by the U.S. Navy, reportedly indicate that locusts can differentiate between TNT, ammonium nitrate and other bombmaking materials, and locate their origins almost immediately. Locusts are known to have a well-honed sense in their antennae, but scientists weren't certain the bugs could detect objects that are foreign to their natural environment.

Biomedical engineering professor Barani Raman and his team's \$1.1 million study found that apparently they can.

"It turns out ... the insects do have sensors for them and very exquisite sensors ... because they can pick up some of these odors at extremely low concentrations — of parts per billion and below," Raman reportedly learned.

If scientists can better understand the brains and receptors of locusts, they might be able to develop swarms of artificial "electronic noses" superior to what's being used to search for explosives now, according to Stars and Stripes.

Because of the simple nature of a bug's brain, researchers are able to implant technologies that record what locusts smell and how it translates.



Locusts are also physically suited to carry "backpacks" containing equipment to read their neurological calculations, the report said.

The study found American locusts worked better in teams than they did as individuals when looking for specific scents. A swarm of seven locusts reportedly turned up positive results 80% of the time. That number dropped by 20% when a single locust was put on the job.

The advancement of cyborg locusts could put regular dogs out of work. While canines make for good bomb sniffers, they come with more baggage than a locust, which is unlikely to be interested in pleasing its human counterpart. Locusts are also cheaper and easier to maintain.

A locust's antenna is reportedly made up of 50,000 neurons with varying characteristics. Some swarms of locusts can travel more than 80 miles per day, according to National Geographic. They are believed to have been adapting and evolving since prehistoric times.

**SOURCE:** americanmilitarynews.com/2020/08/navy-experimenting-with-cyborg-locusts-to-find-explosives/

# INTERESTING READ: THIS 'HERO RAT' IS SAVING CAMBODIA, ONE LANDMINE AT A TIME

BY HEATHER CHEN, www.vice.com

The story of Magawa, a rat who detects landmines in Cambodia, shows how even the tiniest of creatures can work towards peace.



Magawa at work detecting landmines in Cambodia. Photo: PDSA / AFP

Rats are often associated with disease, sewage and trash, but the viral story of a brave rodent in Cambodia has changed mindsets overnight.

Born in Tanzania, Magawa is a 5-year-old African giant pouched rat who can detect deadly unexploded ordnance lying hidden in the jungles and open fields across Cambodia, the second most landmine-affected country after Afghanistan.

From the unexploded bombs dropped during the Vietnam war, to the landmines laid by the Khmer Rouge in the 1970s and in decades of civil conflict that followed, Cambodia has more than 25,000 mine amputees, the largest per capita in the world.

But in a span of four years, Magawa – which means courage – has located an impressive **39 active landmines and 28 unexploded munitions**. He has





helped clear more than 1.5 million square feet of land, the size of 20 football fields, saving tens of thousands from maiming and death in the process.

And last week he became the first rat ever to receive a gold medal award for "life-saving bravery and devotion to duty" in the field.



"Magawa's life-changing work has had a direct impact on the lives of many men, women and children in Cambodia affected by landmines," said Jan McLoughlin, director-general of the People's Dispensary for Sick Animals (PDSA) British charity at a virtual ceremony on Friday, Sept. 25, honoring the rat's incredible achievements.

### "For every landmine or unexploded remnant Magawa finds, he eradicates the risk of death or serious injury. His dedication, skill and bravery are extraordinary examples and deserve the highest possible recognition."

The PDSA's gold medal, which has been given out since 2002, recognizes feats of bravery and acts of exceptional devotion by animals in civilian services. Past year recipients have traditionally been dogs.

But Magawa's win, and a photo of him wearing a bitesized gold medal, went viral online and shone a global spotlight on rats, as emerging research shows new levels of problem-solving, intelligence and empathy among the animals.

### "Magawa's story touches us and shows us that even the littlest of creatures can work towards peace," said American anthropologist

and researcher Darcie DeAngelo from the Institute for Genocide and Mass Atrocity Prevention at New York's Binghamton University.

DeAngelo, who authored a post-doctoral thesis on landmine rats, spent time on the ground in Cambodia, observing rats like Magawa and their handlers at work, as well as vets, animal behavior experts and various training teams.

"Magawa's story is also a reckoning for us in realizing that we are interdependent with our non-human companions on earth who lend a helping paw for a very manmade disaster," she said. She also noted that rats were less expensive than other options.

"Rats are not conventional aid animals and do not fit in with militarism," DeAngelo said. "But they are extremely clever and adaptable and are now being increasingly used because they can detect and locate landmines more precisely than dogs and depending on local operations, cost less to train."

Aided by his light body frame and powerful, highlysensitive nose, the energetic little rat springs into action sniffing out buried bombs in Cambodian cities like Siem Reap as well as remote border provinces like Preah Vihear and Oddar Meanchey.

Once he's picked up the scent of TNT, a highly-reactive chemical component commonly found in dynamite and other explosives - Magawa kicks into high alert, scratching the surrounding ground to alert his team of skilled handlers, who then proceed to identify potential traps and cordon off the area to begin the demining process.

And when he isn't hard at work locating deadly landmines, the rat enjoys some downtime running on his playwheel and snacking on sweet treats like bananas, peanuts and watermelon.

"Magawa is a very quick and decisive worker but he is also the first one to take a nap during a break," said his handler Malen from the renowned Belgian non-profit organization APOPO, which selects and trains African giant pouched rats to detect landmines and even diseases like tuberculosis.

Doctors and staff from the Animal-Mama Veterinary Hospital in the capital Phnom Penh also celebrated their star patient's win. *"Like all hero rats from APOPO, Magawa is treated by our vets every fortnight,"* the hospital's owner Yulia Khouri told VICE News.

"He is a very special, friendly little guy, full of personality and spunk! He can be quite cheeky at times with a headstrong attitude during check-ups, it's very funny. He always gives us a run for our money and doesn't like being told what to do!"

Handler Malen and Magawa share a strong and unique bond, one that transcends beyond the field of work. **"Magawa has saved the lives of so many people and he** *is very special to me,*" Malen said of his friend.

**SOURCE:** *www.vice.com/en/article/935pmp/this-hero-rat-is-saving-cambodia-one-landmine-at-a-time* 







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