

Rats to the rescue

After decades of conflict, Cambodia's roads and fields remain riddled with landmines. Now, specially trained African rats are being used to sniff out the explosives for safe detonation.

BY AMY HETHERINGTON
CONTRIBUTING WRITER

They're the unlikeliest of heroes, working for peanuts (and bananas) to make Cambodia a safer place. Meet the African giant pouched rat, a TNT-sniffing rodent that is helping clear landmines across the southeast Asian nation.

Decades of civil war and international conflicts have left Cambodia with a legacy that is a constant reminder of its bloody past: 26 million bombs were dropped on the country during the neighboring war in Vietnam, and it has the world's highest proportion of mine amputees per capita as a result. The Cambodian Mine Action Centre estimates that between four and six million mines and other unexploded ordnance remain in the ground in Cambodia.

With millions of live cluster munitions and landmines still undetected, these furry mine-detectors are on the frontline in the fight to rid the country of its explosive remnants of war and to give contaminated farmland back to its people.

"They are a valuable tool to add to the whole effort in clearing these awful legacy landmines," said Australian photographer Miriam Deprez, who travelled to Cambodia as part of her photography degree at Australia's Griffith University.

With a fierce sense of smell and a body too light to detonate the landmines, the rats are trained to sniff out the TNT in the explosives. "They are so much more effective than metal detectors," Deprez said. In an area that would normally take a human with a metal detector four days to clear, the Hero Rats (as they are affectionately nicknamed) will only take 20 minutes, as they are not tricked by any scrap metal or shrapnel lying in the ground. They are also able to detect plastic-based explosives.

Wearing mini-harnesses, and tethered to a measuring tape and a line, the rats signal to their handlers by giving the ground a scratch when they sniff out explosives. A demolition team then safely destroys the mine.

"The team we worked with had about 14 rats and the same number of trainers, so they do get to know their rats quite intimately. They are able to really connect with the rat," Deprez said.

The rats go through a nine-month training program, and are well looked after,



Above: As part of their training the rats are given banana as a reward once a positive indication has been made. Every rat has to clear an area of 200 meters in less than 20 minutes, cannot miss any of the mines and can only give two false positive indications. At right: The Hero rats are leashed onto a measuring tape 10 meters apart in a box formation with one trainer on each side.

PHOTOS BY MIRIAM DEPREZ

working only a few hours in the coolest part of the day. "They are nocturnal and don't really like hot weather," said Deprez. "They do most of the work before midday, and the handlers coat their rats' ears in sunscreen so they don't get sunburned. Once their work is done, they sleep for the rest of the day."

The rats are operating in the Srey Nouy area of Siem Reap, where hazardous land along roads and farmland has not been safe to use for generations, the threat of these remnants continually obstructing economic and social development in the area.

It's a program that has already seen success in parts of Africa, where nonprofit APOPO has been training the rats to detect TNT, as well as tuberculosis in human saliva, for more than 20 years.

"The rats helped Mozambique to become completely mine free (in 2015)," said Deprez. "So the hope is eventually for Cambodia to have clear land."

*Learn more at miriamdeprez.com
Courtesy of Street Roots' sister paper, The Big Issue Australia / INSP.ngo.*

