hile away for a week our toilet cistern leaked, turning the bathroom into a pool party for the local cockroach community. Unfortunately, they can't swim. I was left with 20 soggy cockroach corpses. Not the greeting I expected.

Why are they so disgusting? Is it the shiny carapace? The long, wiggling antennae? Cockroaches are capable of injecting dread and loathing into most observers. It seems that unless we take a stand, cockroaches will inherit the earth, so I hereby declare war. Rule one: Know thy enemy.

Cockroaches are insects of the order Blattaria. Less than ten of the 4,500 species of cockroaches are considered pests. At least eight species live in Vietnam.

Cockroaches are ugly. They smell, eat your food without asking and spread diseases. Their leg spikes pick up bacteria and grime spreading it wherever they walk. They contaminate their environment by shedding their skins, which are allergens triggering asthma. And it gets worse.

Cockroaches have a long life span. They live up to 15 months, during which time females can produce a ridiculously large number of eggs, from 200 to over 800. Think about that. Over 800 baby roaches per mother roach, per 15 months. That's a lot of cockroaches wandering around contaminating everything they touch.

They are among the hardiest insects on the planet. Some can remain active for a month without food and survive on limited resources like the glue from postage stamps. In one experiment, cockroaches recovered from being submerged underwater for 30 minutes. There must have been a riptide in my bathroom to rack up that death toll.

So why didn't they climb the bathroom walls? Cockroach legs are made up of a brush like pile acting like a myriad of mini suction cups. To step, the cockroach moves the bristles individually in a wave. Slippery surfaces don't help. This could be a clue to their ultimate destruction. Pulling their legs off won't work as cockroaches can regenerate a leg. Feet are necessary to escape enemies and six legs are better than five.

Ever tried sneaking up on a cockroach? It seems they have eyes in the back of their heads. They don't, but they do have tiny hairs that gauge air movement, so they feel you. They can run fast and change direction up

to twenty five times a second. The roach will spin and dash before you can raise your foot. They will slide into narrow cracks where the human foot can't go. Unlike most insects the cockroach exoskeleton is coated not with a waxy layer but a greasy one. This helps them slide to safety.

Even beheading is not effective. Different behaviours are hardwired in nerve groupings throughout a cockroach's body so they don't need their brain to perform actions like walking or breathing. A headless cockroach can survive for up to a week. Eventually it will die from dehydration.

Cockroaches love kitchens and drains, so maybe some serious cleaning could solve the problem? Not so. A cockroach can live a month without food and two weeks without water. Even injured, a cockroach is unlikely to bleed to death. Cockroaches don't have blood vessels, and their blood is not used to carry oxygen.

This makes for a pretty formidable enemy with a small window of opportunity for aggressive attack manoeuvres, as cockroaches spend 75 percent of their time resting. They are active at night for around four hours, once the humans have gone to bed. \blacksquare



ROACHBUSTERS

So how can we destroy these indestructible ones? Here are a few home remedies to halt the cockroach invasion

BORIC ACID: I've yet to find boric acid street here, but it's available in hardware stores in other countries. A dusting of boric acid can do serious damage, as roaches regularly clean themselves and each other. Ingesting boric acid is lethal for them.

ROACH TRAP: Grab a deep, smoothwalled jar and put a sugary treat inside with a splash of beer. Like humans, roaches are attracted by ale. Ensure the jar top is touching a wall, so they can reach the opening. Once inside, their hairy little legs slide and they can't escape.

PEPPER SPRAY: Roaches don't like red pepper. Spray surfaces with three tablespoons of Tabasco sauce diluted in a litre of water. Once you've stopped sneezing, you should see a reduction in roaches.

MOTH BALLS: Roaches don't like the smell of moth balls. Scatter them liberally but remember they are not good for humans either. Keep away from food and food preparation areas.

CEDAR PRODUCTS: The oils in cedar wood are a natural deterrent. Find some cedar chips to place in drawers and closets. Then let me know where to buy them.

MINT OIL: Cockroaches avoid mint oil, and when coated with it they suffocate. Try some diluted peppermint oil in a spray bottle to ward off the critters.

BAY LEAVES: Bay leaves are another scent that roaches avoid. Place crushed leaves in cupboards and make bay leaf tea as a spritzer.

EAT THEM: If all else fails, try the Cambodian solution. Catch them, fry them and eat them. They are a good source of protein.



MYTHBUSTERS

Now we know the basics, let's look at some of the urban legends.

- Cockroaches die if they land on their backs. TRUE AND FALSE. They are not particularly flexible in human environments, but in the wild there is often leaf litter or debris around so the cockroach can right itself. On a flat tile floor it is much harder.
- Cockroaches do not bite. FALSE.
 Cockroaches can and do bite.
 Occasionally roaches bite humans, usually during sleep.
- Roaches only live in dirty homes. FALSE. Cockroaches live in clean homes too, but they have larger colonies where there's more food.
- Cockroaches can survive a nuclear war. TRUE. Cockroaches have a higher radiation resistance than vertebrates. Cells are most vulnerable to radiation when they are dividing. A cockroach's cells divide only once

- during its weekly molt. Not all cockroaches molt at the same time, so many would be unaffected by a radiation burst. Lingering radioactive fallout might still get them.
- Cockroaches don't like the cold. TRUE. Cockroaches prefer temperatures between 25 to 30°C. Keep that air conditioner blasting.
- If you squash a female roach she will scatter her eggs to ensure family survival. FALSE. Many cockroaches do carry their eggs in a sac behind them though, which may survive, depending on your shoe

