

Plague, pest or pet? The *Rattus* is here to stay

Big, bad cities are commonly associated with large populations of rats, running amuck and causing chaos. *Karen Tay* has been investigating, and it seems Auckland is no exception.

If you squirm at the word “rat”, cringe at rodent images on television or scream when your family cat brings home a furry creature the size of a puppy in its mouth, the following story may offend.

Sewer rats are an endemic pest management problem in central Auckland, costing some businesses thousands of dollars a year in rodent control.

Rodent control of an inner-city building can cost anywhere between \$1000 to \$5000 and 95 per cent of buildings in town have some kind of programme in place, says Peter Torrice, a pest control officer for Total Pest Management.

The company has a number of ongoing contracts for buildings and blocks of shops in the city, most of them backing onto parks or garden areas with rubbish bags.

“If they get into buildings, and it’s very common, they can cause damage. There have been power outages in buildings because they’ve gone through a main cable,” Torrice says.

He says rats chew cables to keep the enamel on their teeth down, otherwise they develop “buck teeth”. They also like living in meshes of cables and wires to keep warm and comfortable.

Rats also live in drains around the city, hence the nickname “sewer rat”, and from there have even been known to come up toilets.

“It’s very rare that they come out of toilet bowls but it does happen because they are prolific swimmers,” Torrice says.

The Norway or brown rat is well suited to the city lifestyle as it lives off garbage and is a great burrower, he says.

Norway rats are easy to get rid of but re-infestation is common because shops are built close together and it only takes one rat to affect the whole block.

Pest control officers use baits or traps to get rid of existing rodents, but they also take preventative measures such as filling in holes and putting weather strips on doors and windows.

“Modern buildings are in their architecture rat-proof, but you generally find rats in the older buildings.

“It’s the gardens. People throw stuff out of windows and you find rats at collection points for rubbish,” Torrice says.

In June 2005, rodent damage to cables in the Rimutaka area caused a nationwide power outage, says IT com-

pany Computer World.

Rats are attracted to telecommunications cables by electronic pulses, says Telecom spokesperson Sarah Berry. Although the company has pest control programmes, rats still manage to get through sometimes, she says.

Apart from the cost of pest control programmes, rats can also wreak havoc with your health. Contamination of food and water are significant risks associated with rat-infested dwellings and areas.

A health protection officer for Auckland Regional Public Health Service says rats have a similar body temperature to humans, so can pose a “significant threat” to public health.

Rodents can carry diseases such as salmonella and can also pass on an infection known as Leptospirosis or Weil’s disease.

Humans living in rat-infested areas can contract the disease, a potentially fatal bacterial infection, from inadvertent contact with rat urine. When the urine is excreted in sewers and mixed with sewer water, contact with the resulting puddle could spread the bug through a minor cut or wound.

An attack of Weil’s disease can start off with common cold or flu symptoms, so can progress to its latter stages before being detected.

However, Dr Craig Thornley, of the Auckland Regional Public Health Service, says contracting Leptospirosis from rats is rare in New Zealand and humans are more likely to catch the disease from cattle or sheep.

Diseases borne by a rat’s feet and carried into private dwellings are more common and a greater threat to public health. Rats act as “accidental vectors” for a number of diseases such as salmonella and giardia, Dr Thornley says. These diseases are carried in a rat’s gut and when excreted, can transfer the illness to a human subject.

Rat-bite fever or Streptobacillus moniliformis is an infection that can develop after being bitten or scratched by rats.

“If you get a rat bite, there’s a chance it can be infected in the same way as a dog bite,” says Dr Thornley.

To reduce the public health risk, the Auckland Regional Public Health Service participates in a global programme that requires incoming ships to carry a certificate to show they are



free of rats.

Auckland City Council also has rat control clauses in park maintenance contracts to reduce infestation rates.

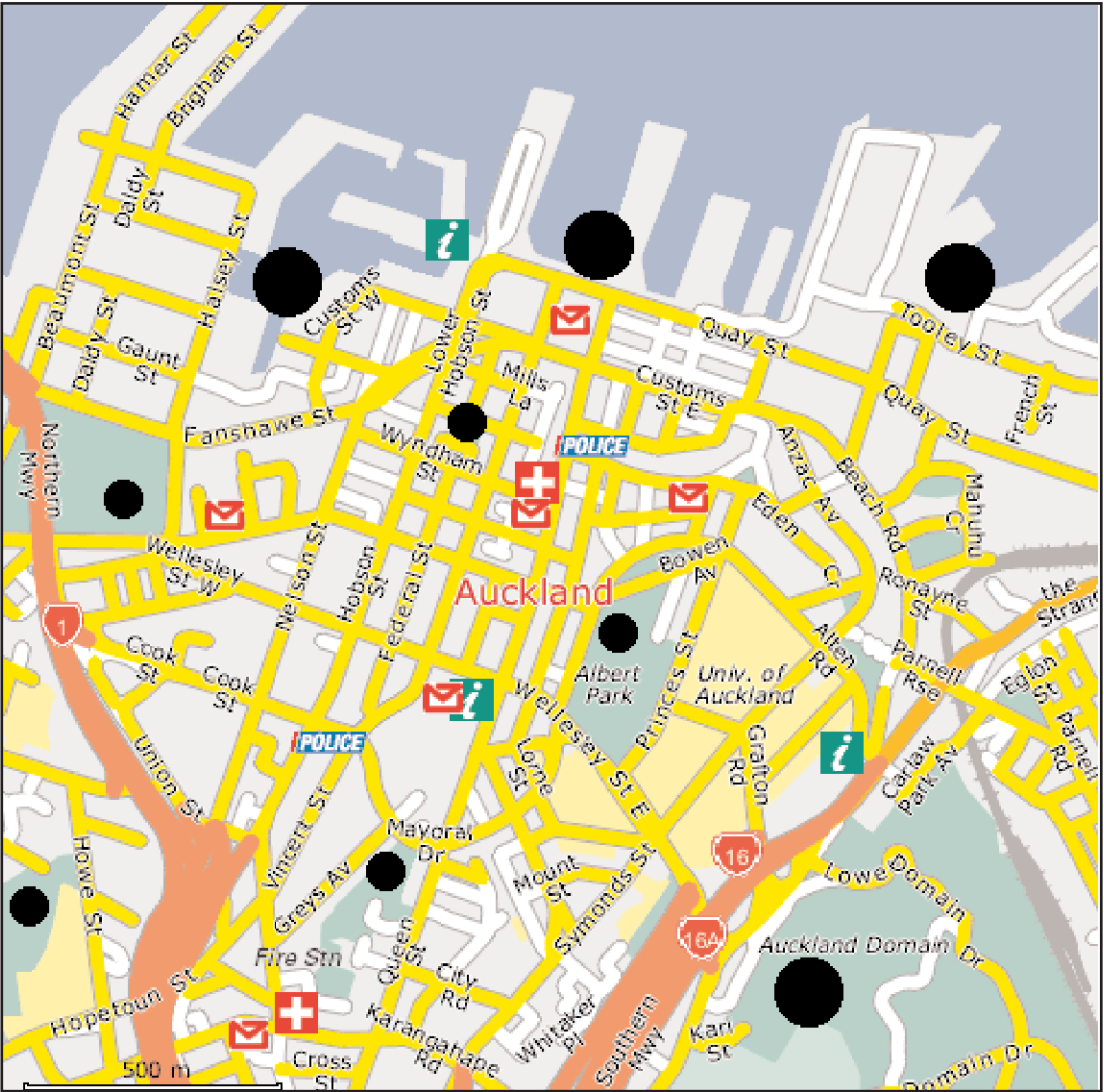
Graham Marchant, parks officer for Auckland central, says some areas of the city are more of a problem than others. For instance, areas near large bodies of water have a greater problem with rat control, Marchant says.

Although the council does not take care of rat problems on private properties and businesses, people can remain safe from rats if they take precautions, such as sealing cracks and gaps in walls, windows and doors. Businesses should adopt preventative pest management programmes, especially if their business is near a park.

Despite pest control measures, Torrice says rats are prolific breeders and here to stay – so city dwellers need to get used to the fact.

“As long as we’re on the planet, we’ll have these things as mates,” he says.

“Anywhere you go, there’s bound to be rodents.”



DANGER ZONE: Total Pest Management says that rats are most likely to live in the areas indicated by the black dots.

A brief history

Rats have been around for 14 million years.

Thought to have originated from South East Asia, they arrived by ship in Europe and spread quickly.

They are prolific breeders, one pair of rats can produce up to 15,000 young, meaning that they are nearly impossible to control.

The brown rat (*rattus norvegicus*) is one of most common rat types.

The brown rat is a popular pet and is also used for scientific experiments. The black rat is best known for its role in helping to spread the bubonic plague.

The plague, which still occurs today, has killed approximately 75 million people since AD 541.

Rats create havoc for farmers, gnawing through crops and contaminating stockpiled grain. Because they breed so quickly, a small infestation can develop into a large scale problem in a very short time.

Thriving in substandard conditions, and with their agile, athletic frame, rats are a world-wide problem.

— Laura Wallace

Day in the Life of a Rat

Name: Roger the Rodent
Species: Norway Rat (*Rattus norvegicus*) aka sewer rat, brown rat
Age: 6 months
Weight: 300g
Hobbies: Chewing, burrowing, mating, eating, swimming, sniffing, and more mating.

6pm: Went for a swim in the harbour to catch some fish.

7pm: Climbed on a boat, which is pretty hard for me, my cousins *Rattus rattus* are much better climbers.

7.30pm: We found some food supplies in the hull, but it was mostly peaches, raw beets and raw celery. These are my least favourite food so we dived back into the harbour.

9pm: The garbage outside Wildlife was beautiful, included some eggs and lots of cheese. After eating our fill we headed for Albert Park.

10pm: As we ran up some tunnels and sewers, came across some telephone lines and power lines. We started chewing into them as it keeps our teeth sharp, but half our group died from electric shock. Oh well, we only live three years so it’s no big deal.

11pm: We meet up with some ladies in the park. After a moments romance we mated. I think it will be Jane’s fifth litter this year. I’ve heard of some females having 15,000 in her lifetime.

12am: We headed back into town for more mating. The rat exterminators have killed a few of our brothers so we are mating more than usual to get our numbers up.

3am: A huge fight broke out, a lot of the lower-ranked rats were killed. This isn’t so good, but hey, we’re almost an invincible species so it’s no biggy.

5am: Settling in for a nap, but I’ll keep my wits about me, exterminators are everywhere...

— Justin Latif



SIGN OF THE TIMES: A notice in the Auckland Domain highlighting the rat problem.