

In search of roadkill

Researcher is studying how many reptiles and amphibians die here due to vehicle collisions

Carolyn Khew

On two days last month, 26-year-old Mary-Ruth Low cruised along leafy roads near forested areas on her Yamaha motorbike.

Ms Low, a research assistant at the National University of Singapore (NUS), was not out on joy rides but going around at a speed of 25kmh to look for animals – dead ones to be precise.

This may seem like a gory task, but it is part of a one-year study that Ms Low started last month to get a sense of how many reptiles and amphibians die due to collisions with oncoming vehicles.

Once every two weeks, she and two others visit 10 sites, including Old Upper Thomson Road and Mandai Lake Road, to look for animal carcasses. The areas chosen include those where roadkill is said to be found most frequently.

Armed with a handheld GPS (global positioning system) device, a ruler and a point-and-shoot camera, Ms Low takes pictures of dead animals and records the precise locations where they are found.

She does not usually pick up the animal carcasses. But if she comes across a rare species, she will hand it

over to the Lee Kong Chian Natural History Museum for research purposes.

Asked what made her start this study, Ms Low, who does research at NUS on the spatial ecology of reptiles, said there is hardly any documenting of roadkill involving animals such as snakes and monitor lizards.

This was even though “being ground-dwelling and slow-moving creatures, they are most prone to deaths by oncoming traffic”.

“The data is out there but no one is really looking,” she said. “Hopefully, we can establish baseline data which can be used for future reference.”

Mr Louis Ng, chief executive of the Animal Concerns Research and Education Society (Acres), said animals may be on the roads to bask or roost at roadside vegetation.

“Land-clearing for developments pushes native wildlife to use urban corridors, leading to increased chances of human-wildlife interactions,” he added.

Last year, Acres received 26 calls from members of the public about roadkill involving animals such as macaques, turtles and snakes. There have been at least five such calls so far this year.

When asked, the National Environment Agency (NEA) said it received 2,198 notices of feedback last year on dead animals sighted, regardless whether they were killed on the roads or otherwise. In 2013, the figure was 2,324.

“NEA clears such animal carcasses that it comes across as part of its scheduled cleaning rounds or in response to public feedback, in the interest of public health,” said an NEA spokesman, who added that the agency is responsible for clearing animal carcasses in public areas, except estates maintained by the town councils.

Wildlife experts have suggested building “road calming measures” such as speed bumps and animal crossing signs near roadkill-prone areas to minimise such occurrences.

At Mandai Lake Road, signs are placed along both sides of the road leading to the Singapore Zoo to warn motorists of possible animals ahead.

In some instances, rarer wildlife such as pangolins, leopard cats and the critically endangered Banded Leaf Monkey have fallen prey to oncoming traffic.

Mr Nick Baker, who is helping in Ms Low’s study, started his own recording of roadkill incidents along Old Upper Thomson Road since he moved to the area in 2012.

Mr Baker, a member of the Vertebrate Study Group of the Nature Society (Singapore), said the road is a hot spot as it used to be part of the Grand Prix circuit in the 1960s.

“Inconsiderate drivers use the road to show off their fast cars,” he said. “Many other drivers are simply not observant enough to see animals on the road.”

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ST PHOTO: SEAH KWANG PENG
NUS research assistant Mary-Ruth Low has been cruising along roads near forested areas on her motorbike to document roadkill involving animals such as snakes and monitor lizards.

Carcasses used as research specimens

Not all animals die in vain.

Over at the new Lee Kong Chian Natural History Museum, some get turned into research specimens in their afterlife.

Its museum officer Marcus Chua told *The Sunday Times* that each specimen is “valuable to science”.

For example, the stomach contents of the animal can provide information about its diet, he said.

A portion of the animal tissue is preserved or cryogenically frozen at very low temperatures and kept in the tissue collection for genetic research. “Eventually, the whole animal is preserved for future scientific work. Sometimes, the right person may come by years down the road and make a striking discovery,” said Mr Chua, 31.

Many of these specimens are also used for science education workshops and public awareness exhibitions at the museum, which will open in April.

About one-third, or 11, of the 32 carcasses collected last year were believed to be roadkill, said Mr Chua.

While snakes and birds make up most of the salvaged specimens, the museum has some rarer finds.

They include an endangered leopard cat collected in 2001, a greater-mouse deer, and a smooth-coated otter received last week.

“I think knowing what is out there and being killed on the roads is the first step,” said Mr Chua.

“But using the data to find out which species may be imperilled by vehicular traffic, and how to go about reducing this mortality for the conservation of biodiversity is the next step.”

Those who spot a wild animal carcass can inform the museum on 6516-5082 or visit its website at <http://lkcnhm.net/dead-wildlife/>.

They may also call the Animal Concerns Research and Education Society on its 24-hour hotline, 9783-7782.

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