

Rabbits needed as fodder for predators to protect endemic mammals

October 13 2015, by Carys Garland, Sciencenetwork Wa

Land managers need to consider a more comprehensive approach to control feral cats (*Felis catus*), dingoes (*Canis lupus dingo*) and rabbit populations in order to save WA's small mammal populations, according to a local wildlife conservation expert.

A recent Edith Cowan University study compared the dining choices of feral cats and dingoes in WA's semi arid region, using the animals' droppings to determine what they had been preying on.

ECU PhD graduate Tim Doherty says feral cats have had a devastating impact on regional wildlife.

"They've caused the extinction of more than 20 different Australian mammal species," Dr Doherty says.

Dr Doherty collected 163 predator scats over 19 months along unsealed roads and tracks around Charles Darwin Reserve in the Mid West.

The scats were then sent to a specialist who dissected them looking for animal bones, teeth, feathers and scales, which are then compared to reference collections to identify the prey species.

Dr Doherty says rabbits were the most commonly occurring meal of choice for feral cats.

"We also found cats frequently fed on reptiles and other [small mammals](#)

such as rodents and marsupials," he says.

The study found dingoes preyed on larger species compared to cats.

Lack of threatened species as meals suggests local extinction

"Dingoes also preyed on rabbits but they fed quite frequently on kangaroos as well and that's because they're a larger predator and able to kill the larger kangaroos that cats can't," he said.

"We didn't record any threatened species in the diet of either predator, but that's because most of them have actually gone extinct for that reason.

He says historically they would have found mammals like the like the woylie (*Bettongia penicillata*), chuditch (*Dasyurus geoffroii*) and bandicoot (*Peramelidae*) but they had been eradicated over the last 200 years by fox and cat predation, inappropriate fire regimes and other threats.

Dr Doherty says [land managers](#) controlling rabbit populations through baiting or disease need to think about the implications for [feral cats](#) and their diet.

"If rabbit populations decrease, cats could prey even more heavily on things like the small mammals," he says.

"Ideally when we're controlling pest species, we should be looking at a whole-of-ecosystem approach, so that you're managing multiple [species](#) in unison to ensure you don't create an imbalance in the ecosystem that does more harm than good."

Dr Doherty says future studies should investigate feral cat diets in arid areas, in order to could compare how the pest's diet varies according to

different ecosystems.

More information: Tim S. Doherty. "Dietary overlap between sympatric dingoes and feral cats at a semiarid rangeland site in Western Australia," *Australian Mammalogy* (2015). [DOI: 10.1071/AM14038](https://doi.org/10.1071/AM14038)

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