

KCT Position Statement

Feral Cat – Trap, Neuter, Return/Release Programmes

August 2021

Kea are listed as ‘nationally endangered’ with a declining population (estimated 3,000-7,000 remaining). Introduced predators (mustelids, rats, possums, and feral cats) are considered top threats to kea and other native species. The Kea Conservation Trust (KCT) is investing considerable effort and resources into monitoring this threat and protecting kea. As such, we view feral cat Trap, Neuter, and Return/Release (TNR) programmes as a direct threat to our conservation efforts.

Kea are ground-nesting parrots that are vulnerable to predation. Monitoring of kea nests since 2009 by the KCT and Department of Conservation (DOC) show they are regularly visited and predated by introduced predators, including feral cats. In the last two years, DOC research has also shown foraging kea are directly predated by feral cats. A new study by Manaaki Whenua using GPS tags to understand the movement of feral cats in these areas shows they are wide-ranging, travelling considerable distances over relatively short periods and across all terrains (dense native bush, valley floors, and alpine tops) (Young, pers comm, August 2021).

Community predator control groups in kea habitat consistently trap large numbers of feral cats reinvading from surrounding farmland. In the Matukituki Valleys, Mt Aspiring NP, one of our long-term kea study sites, 70 cats have been caught over a three-year period by local conservation volunteers (Matukituki Charitable Trust, unpubl.data July 2021).

Feral cats and, to a lesser degree, domestic cats are responsible for the extinction of six bird species in Aotearoa and have caused the decline of several native species of birds and lizards (Rouco et al, 2018). One feral cat in Kaitorete Spit, Canterbury was found to have 17 native lizards in its stomach, estimated to have been eaten over the course of one day (Hayward, 2020). Another feral cat trapped in central Otago was found with 36 skinks in its stomach (Reardon, 2006). Critically endangered Kākāpō had to be removed from Rakiura/Stewart Island after feral cats reduced their numbers to 60. Over the course of a week, a single feral cat in Ohakune killed 102 short-tailed bats. In 2020, one domestic cat was observed killing five banded dotterels in Kaikoura, while both feral and domestic cats were responsible for the failure of 15 out of 22 nests. A similar nest failure rate has also been seen for dotterel nests in Eastbourne, Wellington (Donnell, 2021). More locally, the critically endangered Grand and Otago skink populations have been negatively impacted by feral cats (DOC, 2021).

In addition to the direct predation threat of feral cats on kea and other native wildlife, they also cause serious harm through ongoing nest disturbance, resulting in loss of adult provision to nestlings and non-lethal, traumatic injuries.

Birds are defined as both “animals” and “wildlife” under the Wildlife Act 1953. It is an offence to “hunt or kill” wildlife and “hunt or kill” is defined, not just as hunting or killing by any means but includes “pursuing, disturbing or molesting any wildlife... whether this results in killing or capturing or not, and also includes every attempt to hunt or kill wildlife ...” Deliberately releasing cats, neutered or not, into the environment when their devastating impact on birds, especially ground-nesting ones, is so well documented could be seen as being in breach of this Act and lead to prosecution.

Although considerable effort and resources are being directed into controlling rats, possums, and mustelids through the Predator Free 2050 programme, feral cats are not included in any co-ordinated pest control response or legislation. Domestic dogs, on the other hand, are required to be contained and under control at all times under the Dog Control Act 1996. Failure to do so can result in owner prosecution.

TNR programmes are promoted as a humane solution to controlling feral cat populations by creating managed colonies that cannot reproduce. TNR, however, is ineffective at reducing cat numbers or reducing predation of native species. Rather, it aims to improve cat welfare, not reduce wildlife predation or disease spread (Longcore, 2009; van Heezik, 2019). Regardless of how well-fed they are, cats kill wildlife and are also a source of disease that can kill or threaten the health of native species, domestic stock, and humans (ibid). For example, *Toxoplasma gondii*, a protozoan parasite known to be hosted only by felids, causes the potentially fatal disease toxoplasmosis (toxoplasmosis) in a wide range of species, including humans. Toxo is widespread throughout New Zealand and can remain infectious in the soil and freshwater for at least a year, and in seawater for at least six months (Roe et al. 2013 in DOC, 2020).

Cats are opportunistic, generalist carnivores. When introduced prey species (e.g. rabbits and rodents) are abundant, cats will likely include a high proportion in their diet but will still consume other prey they encounter, including native birds and reptiles. When rodent and rabbit densities decline (as a result of seasonal population fluctuations or managed pest control programmes), cats are likely to switch prey and increase predation pressure on native fauna (hyperpredation) (McGregor et al, 2020; Mutz, 2007; Doherty et al, 2015; Norbury et al, 2008). With a reduction in an initially abundant prey there is likely to be a net reduction in food and a reduced carrying capacity for cats. The knock-on effect of this is increased mortality and dispersal of cats; a welfare issue not only for cats, but also for wildlife.

Globally, cats have been listed among the 100 worst non-native invasive species in the world. Free-ranging cats on islands have caused or contributed to 33 (14%) of the modern bird, mammal, and reptile extinctions recorded by the International Union for Conservation of Nature (IUCN) Red List (Loss et al, 2013). They are the principal threat to almost 8% of critically endangered birds, mammals, and reptiles (Medina et al, 2011). A meta-analysis suggests that cat impacts are greatest on endemic species, particularly mammals, and greater when non-native prey species are also introduced (ibid).

Knowing that i) feral cats are a serious and direct threat to many of our endangered endemic species, including kea, and ii) that TNR programmes have been shown to not reduce the incidence of predation or disease threat on wildlife globally, the Kea Conservation Trust cannot support the practice of TNR in Aotearoa/New Zealand and considers this practice to directly contravene the Wildlife Act 1953.

Furthermore, the Kea Conservation Trust strongly supports:

- i) a move to legislate for more cat owner responsibility to ensure domestic cats are contained and under the control of their owners at all times (as per dog legislation);
- ii) the Wildlife and Wild Animal Control Act's move to include feral cats in their list of pest species harmful to New Zealand's unique and protected wildlife;
- iii) a move to include feral cats within the scope of Predator Free 2050; and

- iv) a collaborative effort by conservation groups, wildlife vets, animal welfare and public health sectors to advocate on behalf of our threatened native species to counter ideologies promoting TNR and cat colonies.

New Zealand's vulnerable wildlife evolved in the absence of mammalian predators and, as a result, has no defence against highly effective hunters such as cats. TNR programmes should therefore be considered a significant threat to our wildlife populations and conservation efforts and should not be legitimised, normalised, or supported, either socially or legally, in Aotearoa.

What Conservation Biologists Can Do to Counter Trap-Neuter-Return (adapted from Lepczyk, 2010).

It has been noted throughout the literature that there is hesitation by conservation and wildlife groups to tackle the issues of cats (both domestic and feral), even though there is undeniable evidence that cats are a serious threat to wildlife globally. By avoiding dialogue on this issue, we risk the normalisation and societal acceptance of cats depredating on our threatened wildlife.

Here in Aotearoa, we are actively aiming to become "Predator Free by 2050" and yet we have chosen to avoid one of the most efficient predators - cats - when implementing this. It is important as kaitiaki/guardians of this land that we address this threat as a matter of urgency. We can do this by:

1. Working with and promoting dialogue about the issue with vets, animal welfare and public health communities.
2. Challenging policies promoting TNR and cat colonies and providing scientific information to the public about their conservation, welfare, environmental and health impacts.
3. Advocating for legislation making it illegal to maintain cat colonies on public land.
4. Advocating for legislation that encourages responsible cat ownership (as per dog legislation).
5. Increasing public awareness of responsible cat ownership practices.

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