From:
Sent: Friday, 10 January 2025 2:15 PM
To: Animal Welfare
Cc: 'Jack Gough'
Subject: Inquiry into the management of cat populations in New South Wales - Post-hearing responses - 16 December 2024

Hello David

Jack may have sent you this already, but just in case, Ive attached:

- the transcript with a couple of corrections,
- a word doc with responses to the questions on notice (one per page), along with the key original sources that inform those responses.

Many thanks
Sarah Legge

Professor (Wildlife Conservation) Charles Darwin University
Honorary Professor, The Australian National University
Principal Research Fellow, University of Queensland
Biodiversity Councillor
Co-editor in chief, Wildlife Research

Question on notice from Peter Primrose:

Is there anywhere in the world that is [doing pet cat management] well?

ANSWER: No. In most continental countries, demonstrating that pet cats have impacts on native species has been more difficult. The native faunas or Europe, Asia, Africa and the Americas have co-evolved with one or more species of small cat, and pet cats have existed for longer, so there hasn't been a sudden surge in extinctions, as we see here in Australia. The impacts of cats have been easiest to demonstrate on islands (including New Zealand) and the island continent (Australia). There are grave concerns in some European countries and the USA about impacts of high densities of roaming per cats on bird populations, but these concerns have not yet flowed through to policy or legislative reform.

Question on notice from Peter Primrose:

[Can you provide] comments on the recommendations in relation to amendments to the Companion Animals Act in the Local Government NSW

3. Amend the Companion Animals Act 1998 to:

a) define when a cat is considered to be owned, or what cat ownership entails;

Sounds helpful, as long as the definition isnt expanded to cover the situation of so-called 'community cats', which are really unowned cats that some people enjoy feeding occasionally.

b) clarify the application of section 32 (powers for seizing a cat)

Sounds reasonable

c) define cats as domestic, infant or feral.

Im not sure why the infact category is needed

d)enable councils to introduce enforceable cat containment or curfew policies in their local government areas.

Strongly support

e) enable feral cats without any reasonable prospect of rehoming to be euthanased in accordance with animal welfare ethics and the policy adopted by the relevant council;

Strongly support – it means the local gov wouldn't be forced to hold feral cats for at least 7 days. Holding them entails cost and is stressful for the cat.

f) Add an opt-in provision for councils to issue orders and fines for individuals who repeatedly fail to identify and register kittens or for incidences of animal hoarding.

Strongly support

g) Subsidise desexing programs for cats state-wide, but particularly for owners in financial hardship or where there are significant numbers of semi-owned / 'homeless' cats.

Strongly support

Question on notice from Sue Higginson:

…your research and your views and opinions in relation to the trap, neuter, release support programs and the assumption, I think, that cats are always in the environment—that there's a place for them, therefore, we release them. Any work or views that you have on that method or program and are able to provide, I would be very interested in.

The national feral cat threat abatement plan (DCCEEW 2024) classifies cats as 'pet' (owned and cared for) and 'feral' not owned, and not consistently cared for. When unowned (i.e., feral cats) are living in or near towns, they are sometimes called 'strays'.

Legge *et al.* (2017) estimated (with low confidence) that there were over 700,000 stray cats in Australia. These cats obtain some of their food from human refuse and deliberate feeding, but they also hunt live prey. Recent analyses estimate that stray cats in Australia kill 130 million reptiles, 44 million birds and 149 million mammals annually (Murphy *et al.* 2019; Woinarski *et al.* 2017; Woinarski *et al.* 2018). Predation by stray cats can lead to wildlife decline, including of seabird breeding colonies (Greenwell *et al.* 2019).

Stray cat populations can be reduced by intensive trapping and euthanasia of all captured cats; this action needs to be maintained over time, and is more easily implemented if pet cats are contained and desexed (Levy and Crawford 2004).

Trap-neuter release (and its variations (Calver *et al.* 2022)) is considered by some to be an alternative approach to euthanasia. In TNR, cats are captured, surgically sterilised, then released again. Sometimes people near the release site are encouraged to provide some food to the released cats, but not always.

The argument for TNR is that it is a more ethical approach to (1) reducing the number of stray cats; (2) and thus presumably their effects on other animals and people (although this is often unstated); because it considers (3) the welfare and rights of the individual 'stray' cats, and (4) the emotional heath and rights of shelter staff and cat-carers that object to cat-killing (Crawford *et al.* 2023; Tan *et al.* 2017). These issues are considered below:

1. Does TNR reduce the population size of stray cats?

Although some studies have claimed partial and/or short-term success (Levy *et al.* 2014; Swarbrick and Rand 2018; Zito *et al.* 2018), other TNR programs have clearly failed (Boone 2015; Castillo and Clarke 2003; Foley *et al.* 2005; Jessup 2004). Evidence about TNR effectiveness is contested (Calver *et al.* 2020; Debrot *et al.* 2022; Lepczyk *et al.* 2010; Longcore *et al.* 2009; Read *et al.* 2020; Wolf *et al.* 2021; Wolf *et al.* 2019), but knowledge of cat ecology and human behaviour indicate that TNR can only succeed if:

- A very high proportion of the colony is sterilised, because cats can breed and disperse quickly (Andersen *et al.* 2004; Gunther *et al.* 2022)
- Sterilisation is carried on intensively and unremittingly (Coe *et al.* 2021; Schmidt *et al.* 2009)
- The stray cat population is isolated (i.e., no or very little immigration) and small (Jongman and Karlen 2006)
- Nearby cat-owners are discouraged from cat-dumping into the stray population
- Cat-carers are happy with the long-term objective of their cat colony dwindling to zero.
- Society is willing to pay the higher costs of sterilisation surgery, compared to euthanasia.

These pre-conditions for TNR success are vanishingly rare and unrealistic. Under most conditions, TNR will not succeed at reducing the stray cat population, and it should not be the default management approach. However, there may be some circumstances where it is an option (Kennedy *et al.* 2020).

2. Does TNR reduce the impacts of stray cats on other animals, and on people?

Stray cats that are sterilised and then released:

- Still hunt wildlife and can threaten wildlife populations (Barrows 2004; Calver *et al.* 2023; Crawford *et al.* 2020; Hernandez *et al.* 2018)
- Still spread disease to humans and other animals
- Are still a welfare concern because their diet is usually very poor (Crawford *et al.* 2020), they experience high rates of injury and death from disease, car strike, and attacks from other cats and dogs (Calver *et al.* 2020)
- Can still be a nuisance to people (Dabritz *et al.* 2006)
- Are still a management problem for local governments (Nou *et al.* 2021)
- Can encourage cat dumping because cat owners think their pet will be looked after in the TNR colony
- Act as a link allowing 'transfer' of cats from the pet to the feral population

In other words, TNR does not achieve any of the objectives for controlling stray cat populations in the short- to medium-term. In the longer-term, the objectives can only be achieved if the stray cat population is successfully reduced, which is unlikely.

3. Does TNR improve the welfare and recognise the rights of individual stray cats?

- Capturing a feral/semi-feral animal to hold in a vet facility and perform invasive surgery, may be a poor welfare outcome for the cat, compared to capture and immediate humane euthanasia.
- The sterilised cat is released back on the street, facing the same food insecurity, disease, vehicle and dog attack risks, all of which are poor welfare outcomes, compared to immediate humane euthanasia (Crawford *et al*. 2019).
- Removing the ability of an animal to reproduce is an infringement of its rights.
- The welfare and rights of individual cats cannot be considered in isolation of the welfare and rights of the animals the sterilised cats continue to injure and kill. Considering the suffering (and rights) of the many animals killed or maimed by individual cats, removing stray cats rather than sterilising then releasing them provides a net welfare benefit (Debrot *et al.* 2022).
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4. Does TNR reduce the emotional suffering to people?

Some people who care for stray cats, and animal welfare shelter staff that euthanise unwanted cats, can experience emotional pain from cat euthanasia (Wolf *et al.* 2019; Crawford *et al.* 2023). TNR may alleviate their emotional suffering.

However, people can also experience emotional pain at the death of native animals and the decline in native animal populations. Most Australians support killing cats (and other introduced animals) if this helps conserve threatened species (Zander *et al.* 2022; Zander *et al.* 2021). TNR may cause them emotional pain.

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Question on notice from Sue Higginson:

Could you provide the Committee with any summary or pertinent points in relation to the findings of the NRC report… in relation to the cost ($6 billion).

There are several pathogens that depend on cats to complete their life cycle; without cats, the pathogens cannot exist. These include:

- *Toxoplasma gondii*, a single-celled parasite which causes toxoplasmosis in humans and farm animals, with symptoms ranging between a mild flue; swelling of the brain, heart and other organs; to foetal abnormalities and miscarriage if infections occur to pregnant females. Long-term *Toxoplasma gondii* infections are associated with a suite of subtle behaviour changes in the host that, in people, can increase the risks of vehicle and workplace accidents, and increase rates of some mental health disorders, including schizophrenia. People and livestock are infected by ingesting the eggs (released in cat poo, and very common in soil, sandpits, veggie gardens), or by eating undercooked meat containing the parasite encased in tissue cysts
- *Toxocara cati*, a roundworm which causes toxocariasis to people and livestock. In people, toxocariasis can result in damage to the eye tissue. In livestock, the parasite causes lesions in the meat. People and livestock are infected by ingesting the eggs released in cat faeces, that persist for a long time in the environment.
- *Bartonella henselae*, a bacterium that causes fever and flu-like symptoms (cat scratch disease) to people and livestock. It is transferred when cats bite or scratch and leave saliva on the fresh wound.
- *Sarcocystis* sp (2 species), a single-celled parasite that creates cysts in meat, affecting the saleability of the carcass.

We collated national and global data on infection rates, health and production consequences to estimate the annual costs (medical, veterinary, other direct costs, lost income) of cat-dependent diseases In Australia.

- For human cases of *Toxoplasma gondii* and cat scratch disease, the cost estimate is $6.06 billion (plausible range AU$2.11–10.7 billion)
- For livestock production from *Toxoplasma gondii* and Sarcocystis sp., the cost estimate is AU$11.7 million (plausible range $7.67–18.3 million)

Infection rates could be lowered by reducing the number of feral cats living in farms, towns and cities; keeping pet cats securely contained indoors or in a cat run; reducing transmission rates via food and from the environment with hygiene practices; and/or encouraging people not to keep pet cats.

More information is available in the two attached factsheets, and the published, peer-reviewed paper:

Reference

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