Submission No 415

INQUIRY INTO MANAGEMENT OF CAT POPULATIONS IN NEW SOUTH WALES

Name: Name suppressed

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Impact of cats on urban biodiversity

Context

- As habitat modification and climate change intensify globally, urban environments are becoming the best or only available habitats for fauna (Fardell et al. 2022), with many threatened species found within Sydney.
- Cats compound existing threats to wildlife associated with urbanisation, climate change and habitat degradation.
- Indirect impact of cats within the landscape include:
    - Changing behaviour of wildlife
    - Disease transmission
- Direct impacts of cat predation or injury of wildlife impact species across categories (threatened or common), including birds, frogs, reptiles, invertebrates and mammals (anything with a body size of ≤4kg).
- Whilst there is a focus on threatened species, "common species play a disproportionate role in shaping ecosystem structure and function" (Wright et al. 2022) meaning that loss in abundance and diversity of these species can contribute to the ecological cascade effect (aka extinction cascades).
- In Randwick there have been significant (and ongoing) declines in small bodies fauna (≤4kg) over the past 2 decades, culminating in suspected and projected local extinctions. The disappearance of birds such as the Eastern Spinebill from our landscape are likely to impact the pollination rates of plants impacting viability of critically endangered *Eastern Suburbs Banksia Scrub*.
- Whilst cats may not be the only factor in biodiversity decline their presence in the urban landscape is a contributing factor and one which is considered solvable.
- Domestic cats *prefer* the sheltered or vegetated habitat which native wildlife (including birds, mammals, frogs and reptiles) rely upon (Fardell *et al*. 2022).
    - This means that whilst much work is put into maintaining habitat corridors, bushland remnants and wildlife refugia these areas become networks for cats to move through and freely predate on species which have nowhere else to go.

Conflicts

- Pet cats already outnumber feral populations, with numbers increasing in parallel with growth in human populations (AMA 2019).
- Urban populations of cats persist in the landscape at far higher densities than ferals, so whilst pet cats may kill fewer animals on average their impact is compounded (Legge et al. 2020 suggests pet cats ~28-52 times the predation rate of feral cats in non-urban environments).
- Animals frequently observed hunting wildlife in bushland across the LGA are well groomed, healthy and often wearing collars indicating that most cats within Randwick are pets or are otherwise cared for by residents.
- Most prey items are not brought home (Legge et al. 2020) causing many cat owners to significantly underestimate hunting success of their pets.
- Many owners underestimate the distances their pet's roam with a single animal potentially visiting numerous nature reserve or private gardens.
- Cats are skilled hunters throughout the day and night, generally targeting birds and reptiles during daylight, mammals and frogs overnight (reflecting activity levels of prey species more than cat behaviour).
- Cat populations in private lands create complex inter-agency conflicts, particularly in cases where unrestricted breeding occurs.

Fencing

- Often the emphasis is put on councils and national parks to install and maintain fencing to keep cats out of conservation significant areas shifting responsibility and costs.
- Predator proof fencing often does more harm than good for native wildlife impacting long term viability. Fences can cause significant harms to wildlife by:
    - Causing stress, injury or death from entanglement or collisions.

- Changing access to necessary resources (food, water, shelter).
- Altering distribution or reducing movement of wildlife which may be required to respond to other threats.
- Reducing connectivity to broader landscape.
- Isolating populations, impacting breeding activity, creating genetic bottlenecks.

Cat owner behaviour

- Dog roaming and associated impacts has been significantly curbed in the span of a single generation, the same could be achieved for cat owners, with the right support.
- Not all cats will have the same impact on wildlife, some are super hunters, and some are not, others may specialise in catching certain species, often relating to individual preference, personality or access.
- Previous campaigns have focussed on cat containment overnight, allowing animals to roam during daylight hours, this was based off a now disproven assumption that cats hunt more at night. To effectively protect wildlife, cats should be contained or supervised at all hours of the day, as are dogs.
- Evidence is clear that shifting behaviour of cat owners is key.
- "Cat containment campaigns can be more effective if they design messaging that align with cat owners' concerns for their cats' wellbeing and engage messengers who fit with these messages and who cat owners respect or relate to" (Eeden et al. 2021) this is best achieved by:
    1. Advising owners of the risks to cats of roaming.
    2. Changing expectations of acceptable behaviour/ social norms to normalise cat containment.
    3. Reduce the number of pet cats allowed to be owned and make it more costly to keep pets which are not desexed.
    4. Create clearer pathways for keeping cats out of bushland or other key habitat/ conservation areas.

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