07 April 2025

Whare Kaupapa Atawhai/Conservation House PO Box 10420 Wellington 6140 doc.govt.nz

Ref: OIAD-5012

Tēnā koe

Thank you for your request to the Department of Conservation (DOC), received on 12 March 2025, in which you asked for:

- Information including citation details of studies held or referenced by you which relate to the effectiveness of pest management by citizen groups within urban areas in improving conservation status outcomes.
- 2. Information including citation details of studies held or referenced by you which relate to the ecological impact of companion and community cats (by definition, cats which live in and around areas of human habitation) on conservation status outcomes.
- 3. (Context: DOC holds 'the goal of eradicating all mammalian predators from New Zealand's uninhabited offshore islands' by 2050. DOC is identifying 'which islands are feasible and worthwhile to make predator free and developing a prioritised action plan'. 'Focused investment in R&D is also a large part of this plan to improve our ability to defend islands from re-invasion'.) Information including citation details of studies held or referenced by you which indicate the maximum size an island be and still be 'made predator-free'. What conditions and factors other than island size affect feasibility and worthwhileness?

We have considered your request under the Official Information Act 1982 (the OIA).

Your questions and our responses are listed below:

 Information including citation details of studies held or referenced by you which relate to the effectiveness of pest management by citizen groups within urban areas in improving conservation status outcomes.

The Department of Conservation (DOC) has not undertaken any studies on the effectiveness of pest management by citizen groups in urban areas. PF2050 Ltd support predator management projects by citizen groups in urban areas, with relevant studies referenced on their website https://pf2050.co.nz



We have not been able to identify any additional information held by DOC on studies relating to the effectiveness of pest management by citizen groups within urban areas in improving conservation status outcomes.

District or regional councils are likely to hold information on the effectiveness of weed, and other pest, management by citizen groups within their local urban areas.

2. Information including citation details of studies held or referenced by you which relate to the ecological impact of companion and community cats (by definition, cats which live in and around areas of human habitation) on conservation status outcomes.

As per your 4 August 2023 OIA request to DOC and our response OIAD-3312 on 1 September 2023, any new and relevant information relating to the impacts of cats up to around 2020, has been summarised in the 3rd edition of the Handbook of New Zealand Mammals (chapter on Felidae Pp 343-370).

DOC currently undertakes feral cat control at several sites around New Zealand where they pose a threat to native species. This is primarily on public conservation land. In relation to domestic cats, the Department has adopted the following position (as of 2017):

- The Department's preferred definition of a feral cat is: "A cat that is not stray or owned and that has none of its needs provided for by humans".
- The Department supports responsible cat ownership there is a place for domestic cats with responsible owners in a Predator Free New Zealand.
- The Department supports, in principle, the mechanisms proposed in the National Cat Management Strategy* for promoting responsible cat ownership including de-sexing and micro-chipping of domestic cats.
- The Department firmly believes that we must be respectful of cat owners and their rights.

*The National Cat Management Strategy Group (NCMSG), comprising representatives from NZVA Companion Animal Veterinarians, Companion Animals New Zealand, the Royal New Zealand Society for the Prevention of Cruelty to Animals, Veterinarians for Animal Welfare Aotearoa, Predator Free New Zealand Trust, and Local Government New Zealand, have been calling for legislative change to encourage and reinforce responsible ownership of cats in New Zealand.

The Department is a technical advisor to the NCMSG, which provides the opportunity to reiterate the impacts that both feral and domestic cats can have on our native wildlife. In 2020, the NCMSG published a report on the Companion Animals NZ website (see: https://www.companionanimals.nz/s/NCMSG Report August-2020.pdf).

We have not been able to identify any additional information held by DOC on studies relating to the ecological impact of companion and community cats (by definition, cats which live in and around areas of human habitation) on conservation status outcomes.

3. Information including citation details of studies held or referenced by you which indicate the maximum size an island be and still be 'made predator-free'. What conditions and factors other than island size affect feasibility and worthwhileness?

A useful indicator for the maximum size an island can be made predator-free are successful precedent projects. Examples of the largest island eradications to date include South Georgia Island (rodents; 1068 km² treated; 2011 - 2017)¹, Santiago Island (pigs, 585 km²; 1976 - 2006)²; Marion Island (feral cats 290 km², 1977 – 1991)³, Macquarie Island (rabbits and rodents, 128 km²; 2011-2014)⁴.

The size an island can be "made predator-free" has increased in past decades with the rapid expansion of the number of islands treated globally. The increase in achievable island size is associated with improvements in removal efficacy and ability to manage greater complexity (inhabited locations, logistical extremes, multiple target species), generating increased conservation gains⁵.

Factors influencing the "feasibility and worthwhileness" of island eradication other than island size include the target species, the suite of native species present, the threat status of those native species and the habitat restoration potential of the site. The Department of Conservation typically uses six principles of eradication rather than one parameter alone (e.g. island size) to guide the feasibility assessment for pest eradication from an island/group.

These principles are:

- All individuals of the target species can be put at risk by the proposed eradication techniques.
- Pests can be dispatched at a rate exceeding their rate of increase at all densities.
- The probability of the pest re-establishing is manageable to near zero (sustainable).
- Target species can be detected at low densities.
- The project is socially acceptable to the community involved.
- The benefits outweigh the costs

¹ Martin, A. R., & Richardson, M. G. (2019). Rodent eradication scaled up: clearing rats and mice from South Georgia. *Oryx*, *53*(1), 27-35.

² Cruz, F., Donlan, C. J., Campbell, K., & Carrion, V. (2005). Conservation action in the Galapagos: feral pig (Sus scrofa) eradication from Santiago Island. *Biological Conservation*, *121*(3), 473-478.

³ Bester, M. N., Bloomer, J. P., Van Aarde, R. J., Erasmus, B. H., Van Rensburg, P. J. J., Skinner, J. D., ... & Naude, T. W. (2002). A review of the successful eradication of feral cats from sub-Antarctic Marion Island, Southern Indian Ocean. *South African Journal of Wildlife Research-24-month delayed open access*, *32*(1), 65-73.

⁴ Springer, K. (2016). Methodology and challenges of a complex multi-species eradication in the sub-Antarctic and immediate effects of invasive species removal. *New Zealand Journal of Ecology*, *40*(2), 273-278.

⁵ (Spatz, D.R., Holmes, N.D., Will, D.J. *et al.* The global contribution of invasive vertebrate eradication as a key island restoration tool. *Sci Rep* **12**, 13391 (2022). https://doi.org/10.1038/s41598-022-14982-5).

Maukahuka/Auckland Island project is an example of a large island eradication project (pigs, mice, feral cats) that can meet the principles of eradication and was assessed by DOC as feasible to undertake, see the feasibility study here: https://www.doc.govt.nz/our-work/restoring-auckland-island/. Subantarctic Auckland Island is the fifth largest island in New Zealand at 45,889 ha. We are currently in the 'readiness phase' of this project, preparing to implement the eradication when resources allow.

Please note that this letter (with your personal details removed) and attached documents may be published on DOC's website.

Nāku noa, nā

Ben Reddiex

Director National Programmes Department of Conservation

Sen Rulcher

Te Papa Atawhai