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National Office
PO Box 10420
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www.doc.govt.nz
Ref: OIAD-5044

11 April 2025

Tēnā koe [redacted]

Thank you for your request to the Department of Conservation (DOC), received on 20 March 2025, regarding ethical methods of wildlife management.

Your questions and our responses are listed below:

1. Does DOC support Gene editing technology.

DOC does not have a position on gene editing technology. Some potential applications of this technology have potential conservation benefits and others carry risks. The government has introduced new legislation (the Gene Technology Bill) that will change the current rules around the use of this technology in New Zealand if it is passed into law.

2. Does DOC support the clean green, 100%pure branding initiatives that support most of New Zealand's Industries?

"100% Pure New Zealand" is a campaign that has been run by Tourism New Zealand for over 25 years. DOC does support the Tiaki Promise which is also supported by 100% Pure New Zealand. You can read more about this at https://www.tiakinewzealand.com

3. Has DOC reviewed technology such as contraceptive baits that target an invasive species which is currently being used in the UK to target grey squirrel. Does DOC consider using similar technology to target possum, rats, goats, wallaby, feral, stray cats and mustelids?

DOC keeps abreast of research happening in this area, including grey squirrels in the UK, but we are not currently investigating fertility control as a pest control tool. The one exception is the Kaimanawa wild horse management regime where a gonadotrophin releasing hormone vaccine was introduced in May 2022 to control population growth. This treatment and the capture of animals to administer it has DOC Animal Ethics Committee approval.

DOC have previously supported research by Manaaki Whenua-Landcare Research, Commonwealth Scientific and Industrial Research Organisation (CSIRO, Australia) and others investigating the feasibility of immunocontraception for brush-tailed possums and stoats in New Zealand. We're also aware of similar work carried out by CSIRO targeting rabbits, foxes and house mice. These research projects had largely closed by 2010 because there had been insufficient progress towards a viable application.

Fertility control by various means has been proposed as a method for managing wildlife for several decades. Although many fertility control approaches have been assessed in laboratory and pen studies, few have reached the stage of being implemented at a population level in the field. The main reason for this is that field efficacy is limited by the absence of practical delivery techniques. Current fertility control methods are suited to small populations with minimal immigration, where a large proportion of the population can be captured and treated, such as the Kaimanawa horses.

4. What has become of millions of dollars that have been spent on pheromone research for target invasive species.

Universities and other research providers lead research into pheromones. Currently in New Zealand, there are no available control methods that use pheromones for invertebrate pests in natural areas.

Research has been undertaken on mustelid pheromones as lures for pest control and Landcare Research are continuing this research with compounds from ferret bedding.

DOC collaborated with Lincoln University and Plant & Food Research into the use of mustelid pheromones as lures for rats and stoats from 2013-2017. We were unsuccessful in identifying attractive compounds/pheromones that could be used as lures; however, stoat bedding is still used as an attractant for stoats in the field.

5. How many years has DOC been researching pheromones that target invasive species?

Common wasps and German wasps are target invasive species for pheromone research. DOC has collaborated with Plant & Food Research (a Crown Research Institute) to identify the sex pheromone for these two wasps for six years (beginning 2019).

DOC also collaborated with Lincoln University and Plant & Food Research into the use of mustelid pheromones as lures for rats and stoats from 2013-2017. Identification of the main attractive compounds was not successful, but bedding from captive stoats is used as an attractant to help catch stoats.

6. What is DOCs statement regarding global conservation of protected species and the risk of a genetically modifying an organism that may be engendered to not reproduce then being smuggled out of New Zealand back to its country of origin. (Eg Australian brushtail possum).

Animals considered a pest in one country may well be highly valued in another, and research and management strategies should consider the adverse effects of biocontrol agents entering the ‘wrong’ country. Any development of technologies involving genetic modification will need to be undertaken within a broader landscape of regulatory, policy, social and ecological consideration.

7. Does DOC consider Gene editing to be ethical?

DOC does not have a position on the ethics of gene editing technology.

8. If DOCs expert scientists have all stated in scientific research that death by poison cannot be humane, does DOC agree that killing animals with poison is not scientifically ethical?

The statement that '*DOCs expert scientists have all stated in scientific research that death by poison cannot be humane'* is incorrect, so we must refuse this part of your request.

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

Nāku noa, nā

Hilary Aikman
Director Terrestrial Biodiversity
Department of Conservation
Te Papa Atawhai