Department of Conservation
Te Papa Atawhai

OIAD-2538

28 November 2022

[redacted]

Tēnā koe [redacted]

Thank you for your Official Information Act request to the Department of Conservation (DOC), received on 09 November 2022 in which you asked for:

> *"ZP3 is there any thoughts by DOC in trialling this process to control pests?"*

At present, we are not actively investigating immunocontraception using the ZP3 protein or similar antigens 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 Animal Ethics Committee approval. DOC is a member of the Kaimanawa Wild Horse Advisory Group. For more information refer to https://kaimanawaheritagehorses.org/contraception.

We have previously supported research by Manaaki Whenua Landcare Research, Commonwealth Scientific and Industrial Research Organisation (CSIRO, Australia) and others investigating the feasibility of ZP3 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. The main reason for this is that the transfer to field settings is limited by the absence of efficient and practical field delivery techniques. There are no proven orally deliverable contraceptive formulations available for wild animals. 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.

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

Nāku noa, nā

Hilary Aikman
Director Terrestrial Biodiversity
Department of Conservation
Te Papa Atawhai