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Ref: OIAD-5104

5 May 2025

Tēnā koe

Thank you for your request to the Department of Conservation (DOC), received on 2 April 2025, in which you asked for:

1. *I asked what bench marks had been established in the Stewart Island Environment, birds, insects, and vegetation. Do you have anything other than a random patchwork which does not indicate seasons and changes over several years?*
2. *Do you have any explanation established in science as to why pukunui are still present*?
3. *Do you have any explanation other than assumption regarding the loss of tieke, tutukiwi, karearea, mohua, titipounamu?*
4. *Do you think that DOC removing many individuals of these species and relocating them, has contributed to their losses on Stewart Island? (Titipounamu is definitely still present and in the inhabited area of Oban).*
5. *Can you indicate why you feel such as pukunui is a reliable indicator species for Stewart Island?*
6. *Can you tell me why you may not have chosen other indicator species such as kiwi, any sea birds, specific insects or vegetation?*
7. *How are you achieving the safety of wildlife under the 1080 and other poison use?*
8. *How are your mitigation strategies going to stop poison and trapping losses of untargeted species?*
9. *What are the specific mitigation plans that you have chosen for Pukunui and how do these mitigate damage to pukunui?*
10. *How are you establishing what wildlife, birds, insects and vegetation is on the Island and what mitigation is applied for each of the species present?*
11. *If the answer is only in your reference books, is DOC doing any further updated studies?*
12. *What does ground proving mean when indicated as a safety measure by the people poisoning on Stewart Island, DOC? ZIP?*

We have considered your request under the Official Information Act 1982 (the OIA). This information request has been forwarded from Te Puka Rakiura Trust (TPRT) to DOC upon further information being requested from your original email (response provided by Zero Invasive Predators (ZIP) and TPRT on 28 March 2025). We have liaised with ZIP to provide information under one consolidated response.

Your questions and our responses are listed below:

1. *I asked what benchmarks had been established in the Stewart Island Environment, birds, insects and vegetation. Do you have anything other than a random patchwork which does not indicate seasons and changes over several years?*

   We are currently in the process of developing an outcome monitoring programme to measure the benefits of removing target predators. This programme will include pre- and post-monitoring of skinks and geckos and will span a period of 5 years.

2. *Do you have any explanation established in science as to why the Pukunui are still present?*

   Pukunui were once widespread throughout the South Island and are now restricted to breeding on Stewart Island. As they nest on the ground, eggs, chicks and adults are all particularly vulnerable to predators such as hedgehogs and mustelids. Both these predators would have contributed to the extinction of pukunui on the mainland. These species are either absent in the breeding habitat (hedgehogs), or not resident on Stewart Island (mustelids). The reduced suite of predators on Stewart Island, along with the fact that they breed on the exposed tops, probably contributes to their continued persistence. However, if the current rate of decline is not reversed, pukunui are likely to become functionally extinct in the next 5 years.

3. *Do you have any explanation other than assumption regarding the loss of tieke, tutukiwi, kakapo, karearea, mohua, titipounamu?*

   Our explanation regarding the loss of these species on Stewart Island is consistent with the explanation regarding loss across the whole of New Zealand. All these species are known to suffer in the presence of introduced mammalian predators, including cats and rats.

4. *Do you think that DOC removing many individuals of these species and relocating them, has contributed to their losses on Stewart Island? (Titipounamu is definitely still present and in the inhabited area of Oban)*

   Kārearea and mohua have never been removed from mainland Stewart Island by DOC, although mohua have been re-established on Ulva and Whenua Hou. Tutukiwi have been introduced to the southern Tītī islands from the Snares Islands (not removed). Tieke, which are highly vulnerable to rat predation, have been moved to islands around Stewart Island and the Marlborough Sounds once predators were removed. These species were all vulnerable to cat or rat predation. Kākāpō are the only species to have been completely removed from the island. This was because the rate of decline as a result cat predation was so steep that removal was the only option to safeguard the remnant population from extinction.

5. *Can you indicate why you feel such as pukunui is a reliable indicator species for Stewart Island?*

   Pukunui is not being described as an indicator species. The Pukunui predator control operation is a response to the need to reverse the decline of this critically threatened species.

6. *Can you tell me why you may not have chosen other indicator species such as kiwi, any sea birds, specific insects or vegetation?*

   No indicator species have been chosen for this project. However, we know that a range of species have either disappeared or are in decline, hence the focus on working out how to eliminate the threats these species face.

7. *How are you achieving the safety of wildlife under the 1080 and other poison use?*

   Risk assessment is a critical part of receiving permission to use 1080 and other toxins for predator control. For the upcoming proposed operation to protect Pukunui, we are applying for permission to use 1080 only. The DOC permission application requires an assessment of environmental effects, including effects on non-target species. The application must include a plan of actions to mitigate adverse effects when a significant risk is identified.

   As part of planning and preparation for this application, DOC and ZIP are consulting with experts to understand and minimise the potential risk to native animals and non-target species that may be present in the area. Some mitigations already built into the operation, for example, toxic cereal baits are dyed green and scented to deter birds.

   As we are still determining the details of this proposed operation, specific measures are not yet finalised. For an example of how measures have been applied elsewhere, you can read about ZIP's work to minimise risk to kea in South Westland here.

8. *How are your mitigation strategies going to stop poison and trapping losses of untargeted species?*

   Please refer to our response for Question 7.

9. *What are the specific mitigation plans that you have chosen for pukunui and how do these mitigate damage to pukunui?*

   By controlling key predators, we aim to increase the pukunui population overall survivorship and breeding success.

   Pukunui primarily feed on live or recently dead invertebrates and occasionally small fish and are therefore very unlikely to consume cereal baits. While we've identified the potential risk to pukunui of secondary poisoning from invertebrates that have ingested 1080, this risk is considered extremely low. The assessment of low risk is partly due to the selection of 1080 as the proposed predator control method, as the risk of secondary poisoning for insectivorous species is significantly lower for 1080 than for alternatives such as brodifacoum. To date, there are no recorded incidents of waders being harmed during cereal bait 1080 operations.

   Our target window for the operation is August-September, before dotterels return in full numbers to their alpine breeding grounds and prior to egg-laying. This reduces the likelihood of any direct risk during sensitive stages such as nesting, incubation, and chick rearing.

   Based on the assessment above, the Technical Advisory Group considers the risk to pukunui from this proposed control operation to be low.

10. *My question that is not clear enough for you regarding wildlife present on Stewart Island. How are you establishing what wildlife, birds, insects and vegetation is on the Island and what mitigation is applied for each of the species present?*

    As mentioned in response to question 1, DOC is designing an outcome monitoring programme specifically to measure the benefits of the work to a range of species. While the detail has not been fully developed yet, this programme will be in place prior to the eradication taking place. As mentioned in response to questions 7,8 & 9 we will have appropriate mitigation in place.

11. *If the answer is only in your reference books, is DOC doing any further updated studies?*

    Yes, as mentioned in response to questions 1 and 10.

12. *What does ground proving mean when indicated as safety measure by the people poisoning on Stewart Island, DOC? ZIP?*

    Ground-truthing is an important safety step both DOC and ZIP take before an operation begins. It involves field teams walking or flying over the proposed area to verify that the maps used in planning are accurate and up to date. This includes checking for key features such as water supplies, tracks, huts, and fences. By doing this, we ensure that the operational plan reflects the real layout of the landscape and how it is used.

    For example, ground-truthing may reveal that a fence shown on the map has been moved or removed. In that case, the team might adjust the operational boundary to match the current location of the fence- helping ensure the safety of people, property and livestock.

You are entitled to seek an investigation and review of my decision by writing to an Ombudsman as provided by section 28(3) of the Official Information Act.

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

If you would like to discuss this response with us, please contact me by email at: breddiex@doc.govt.nz

Nāku noa, nā

Ben Reddiex
Director National Programmes
Department of Conservation
Te Papa Atawhai