

OIA 19-E-0640/DocCM 6074476

11 October 2019

Mr Fred Carter fyi-request-11211-b78ab4d3@requests.fyi.org.nz

Dear Mr Carter

Thank you for your Official Information Act request to the Department of Conservation, dated 13 September 2019.

Your request

You have requested the following information:

Can you please supply the name of the companies used to collect post 1080 poison drop monitor data for the period of September 2016- September 2019, and also supply all the data they collected for their post 1080 poison drop searches supplied to doc for the same stated time frame, for all areas of nz which monitor work was carried out for doc, all official and unofficial data showing dead animals and all dead animal species including kea, deer and all other species data from notepads, note books, and electronic data showing numbers of dead animals and species.

We have taken this request to relate to two separate issues. The first is who undertakes post operation monitoring. The second aspect relates to what data we hold about how many non-target animals die following a 1080 operation. As we explain below, the nature of the monitoring we do determines that we don't hold much information specifically in relation to the second aspect of your request. To assist your understanding of the issue we have set out information about how we undertake monitoring. Before addressing that we think it is also useful to touch on what we understand to be the context to your request.

Our understanding of the context to your request

We are aware of your public claims about "enormous" numbers of non-target animals affected by 1080. These claims are not supported by the evidence. While we acknowledge that there is a small threat to individual native birds, all our research shows that, compared with the threat from introduced predators, our operations have very little impact on native forest bird communities. These studies have been well documented in the scientific literature and we supply examples later in this response. In addition, so that you can witness the effects of our work for yourself, I am inviting



you to accompany a track-clearing team after one of our operations. I will explain more about this offer below.

Before doing so, I want to give an overview of monitoring work carried out by the Department, our partners and our contractors. This will help you understand our data collection and post-operational monitoring techniques.

Our monitoring focuses on live animals

It is important to understand that our pre- and post-operation monitoring focuses on the number of live animals within an operation site. For example, monitoring is undertaken to determine the relative numbers of rats or possums present before and after an operation. This is because we need to know how many target animals are living in an area (their abundance). The most accurate and efficient way to monitor abundance is from live animals interacting with tracking tunnels and other devices, such as chew cards and camera traps: www.doc.govt.nz/nature/pests-and-threats/predator-free-2050/toolkit-predator-free-2050/monitoring/

We do hold information about animals that have died from 1080 but this is not part of our monitoring

We do keep records of non-target animals such as native birds, stock and domestic animals where they have died and been tested for pesticide residues and that information is stored in the Vertebrate Pesticide Residue Database (VPRD). The database is intended to record deaths of native species that are at risk, and does not form part of our monitoring data because the animals that feature in it may come to light in several different ways including where animals that have been found or reported by members of the public and subsequently tested.

For example, the VPRD records the 17 dead kea found between 1997 and 2019, 15 of which tested positive for 1080 residues. While the deaths of any of these individual birds is very sad, our monitoring tells us that many more kea survived.

While we do keep a record of such deaths, it is important to understand that there are very few dead birds and animals to find in the first place. Improvements to baits and operational practices have greatly reduced non-target deaths:

 $\underline{www.doc.govt.nz/nature/pests-and-threats/methods-of-control/1080/1080-poison-whats-in-the-bait/.}$

Most native bird deaths occurred in 1080 operations last century, and most involved carrot baits. These baits are no longer used. You can find one of the key studies about this here: https://newzealandecology.org/nzje/2946.pdf.

While the information in the VPRD falls outside the scope of your request we would be happy to provide you with this data if you were to make a subsequent request for specific species or pesticides.



Department of Conservation Biodiversity Monitoring Programmes

DOC undertakes monitoring on a range of scales and for a variety of purposes. We have set out a brief explanation of each in the hope it will assist your understanding.

Monitoring for national context (Tier 1)

This includes our Biodiversity Monitoring Programme (NBMP) which regularly assesses native species, ecosystems and pests at approximately 1400 sites spaced evenly across land managed by DOC. A selection of sites is monitored each year, with the whole set covered on a five-year rotation. This shows trends over time for common and widespread terrestrial species, including introduced mammals such as deer and possums. Reports from this information can be generated by the public on our website: www.doc.govt.nz/our-work/monitoring-reporting/plot-level-report/

Monitoring for local management issues (Tier 2)

This involves using standardised specifications and methods in a consistent way to measure the outcomes and outputs of our pest control work. This work is supported by an Inventory and Monitoring Toolbox, which is used by groups across the country: www.doc.govt.nz/our-work/biodiversity-inventory-and-monitoring/animal-pests/

An example of tier 2 monitoring with camera traps is shown in this report about monitoring before and after an operation in a 400 ha area within a 7,000 ha beech forest: www.doc.govt.nz/our-work/tiakina-nga-manu/cameras-capture-the-battle-for-our-birds/

Another example is a study to measure red deer abundance before and after 1080 operations: *No evidence of negative effects of aerial 1080 operations on red deer (Cervus elaphus) encounters and sightings in South Westland forests.* Malham et al (2019). New Zealand Journal of Ecology 43(2): 3364. https://newzealandecology.org/nzje/3364.pdf

Numbers of deer seen and/or heard were recorded in quarterly surveys of South Westland forest blocks between November 2011-August 2015, before and after 1080 operations. This was done while monitoring rat-tracking tunnels.

We have literally millions of these electronic records from monitoring small mammals. These data can be requested from the Department website by filling in a form stating the species, locations, and timeframes for the information you require: www.doc.govt.nz/our-work/monitoring-reporting/request-monitoring-data/

Monitoring to understand and interpret (Tier 3)

This involves intensive research at a few key sites throughout New Zealand. This type of monitoring work has helped scientists measure the effects of predator control for at-risk species. Our researchers have tracked and studied how species survive and breed after predator control and compared this with areas that have not had predator control. Native species that have been monitored include: kiwi, kea, kākā,



robin/toutouwai, bat/pekapeka, blue duck/whio, rock wren/tuke, yellowhead/mohua, rifleman/titipounamu: www.doc.govt.nz/our-work/tiakina-nga-manu-monitoring-results/

In our previous response to you, we included a research paper about kea survival during 1080 aerial operations (*Kea survival during aerial poisoning for rat and possum control.* Kemp et al., 2018. New Zealand Journal of Ecology 43:1-11). This was an example of Tier 3 monitoring, in which individual birds were monitored via their radio tags and unique leg bands.

All our research using monitoring data to discover the risk to kea during and after 1080 operations is publicly available: www.doc.govt.nz/our-work/tiakina-nga-manu-monitoring-results/kea/

Post-Operational Track-Clearing

The monitoring we carry out mainly involves live animals. The only type of "post 1080 poison drop" monitoring we do that involves systematic recording of dead animals is during track-clearing. This is one of the tasks carried out to keep the public safe by clearing toxic baits from walking tracks and exclusion zones. GPS track logs are kept during this task, and the locations of any baits found are recorded as waypoints.

Part of the track-clearing task is a requirement to record non-target fatalities. This is not considered part of departmental monitoring work, however, should any dead animals be found they are recorded in the VPRD because this can provide an opportunity for toxicology testing and/or necropsy which add to our scientific knowledge of predator control methods.

Any dead carcasses found have their location recorded via GPS. Dead birds are collected for testing, following the Department's 'dead bird protocol' (attached with our response). This information is recorded in the 1080 Aerial Operator's Reports and made publicly available on the Environmental Protection Authority (EPA) website www.epa.govt.nz/resources-and-publications/1080-aerial-operators-reports/.

Ten of the approximately 60 operations carried out by DOC during this timeframe reported non-target deaths which are reported below. Most of these animals were not found during track-clearing.

Blackbird x 1	Goat x 1
Cattle x 12	Tui x 1
Deer x 5	Eel x 1
Dog x 1	Weta x 2



This information about non-target deaths is all we hold for monitoring work carried out by the department in the requested timeframe. Please note that final data from September 2019 may not yet be available.

In answer to the remainder of your request, track-clearing during the relevant period was carried out by the following companies, in addition to DOC staff:

- Vector Free Marlborough Limited
- EcoFX
- Tasman Pest Control Ltd
- Vector Control Services
- Epro Ltd
- Contract Wild Animal Control Limited
- Ospri
- Mainland Vector

As suggested, we would be more than happy for you to join a track-clearing team after one of our upcoming operations on the West Coast. If you wish to take up our offer, please send your personal contact details to replies@doc.govt.nz and we will be in touch to make further arrangements with you.

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) will be published on the Department's website.

Yours sincerely,

Erik van Eyndhoven

Director (Acting), Biodiversity Threats

for Director-General