Submissions to The People's Inquiry 2020
Te Uiuinga a Nga Tangata

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Submission to the People's Inquiry 2020 – No. 50 (Update also see submission 73 and attachments)
Region: Glenorchy, South Island.
Name: Dr Fiona McQueen
Oral Testimony: Yes - 1:14:57 Testimony 3 - Dr. Fiona McQueen, Otago - The Silent Forest: the Case Against 1080 [book]

Written submission type: Personal account (3 pages) (Author of "The Quiet Forest" 2017), Letters to the Editor (8 pages)
Main issues: ecological harm, human health, non-compliance, animal welfare
Chemical: 1080 sodium monofluoroacetate, glyphosate
Industry: Conservation

Submission to The People's Inquiry
Fiona McQueen
25 August 2021

I have worked as a medical practitioner in NZ for the last 40 years. I qualified in medicine in 1980 and subsequently became a specialist in rheumatology. I pursued a research career and have published widely in academic journals. A few years ago I returned to my roots and am now living in Glenorchy and working for the Southern DHB. I am affiliated to the University of Otago as an Honorary Clinical Professor of Rheumatology.

The 1080 story began for me in 2013 when a friend described to me how he had gone hunting in a remote corner of Fiordland and had been struck by the complete absence of birdsong in an area where, only a year before, this had been very loud. He and his mates noticed dead birds on the ground, including a woodpigeon, and they also came across deer carcasses. These creatures had churned up the ground as they died. They had not been shot. As the hunters left the area they came across Department of Conservation (DoC) notices that 1080 had been dropped there only a few weeks before. This story disturbed me. The official line at the time was that 1080 did not harm native birds at all but only poisoned rats and stoats. I was unaware of its effects on deer.

Soon after moving south to Glenorchy, a friend alerted me to the fact that 1080 drops were regularly taking place over the Routeburn and Greenstone tracks. This is an area very dear to my heart and I had noticed when walking there in the early 2000's how terribly quiet and lifeless the forest had felt compared to what I remembered previously. I spent two years researching the topic and finally produced "The Quiet Forest: the case against aerial 1080" (Tross Publishing) in 2017 (1). The difficulties and frustrations I faced in trying to get this book published, marketed and brought to the attention of the NZ public will be familiar to anyone who has attempted to publish in this area.

Since publication of The Quiet Forest, I have continued to write letters and articles for various newspapers and have also recorded interviews in the hope of bringing the truth about the 1080 debacle before the NZ public. Mostly, my voice has gone unheard. I have been particularly concerned about the fate of the kea, a bird which is exquisitely sensitive to the toxic effects of 1080 and is now endangered. My recent unpublished letter to the Wanaka Sun on this topic is attached. It has become depressingly clear that the major news media are irretrievably biased in favour of a pro-1080 stance.

I am now aware that the issue facing NZ is far larger than 1080 alone but encompasses the widespread use of chemical pesticides, herbicides and fertilisers. NZ mainstream farming is hugely reliant on the use of the herbicide glyphosate. This chemical has been banned by most European nations and many states within the US, largely because of the World Health Organization's International Agency for

Research on Cancer (IARC)‘s recent decision to re-classify it as “probably carcinogenic to humans” (2). Myers et al. summarise current concerns about adverse health effects in humans from exposure to glyphosate based herbicides (3).

Sadly, NZ has failed to change its stance on glyphosate, which continues to be used abundantly in private homes and gardens as well as by farmers and market gardeners. As a local example, potato growers in the Central Otago region deliberately apply glyphosate to new potatoes just prior to harvesting to induce crop desiccation and make the plants easier to pull out of the ground. It is difficult to find NZ data on levels of glyphosate in potatoes but a 2020 Canadian study found detectable levels in many grains and vegetables and they commented that “the highest glyphosate levels were observed in pulses and wheat products (where glyphosate was approved as a harvesting aid in some jurisdictions during the period of this study)” (4).

From a positive viewpoint, there are moves afoot to change the NZ farming paradigm from war (humans fight pests with an arsenal of chemicals) to organic cooperation (humans work with nature to strengthen plants and the ecosystem as a whole). Regenerative farming is being taken up by individual farmers across the country. Examples include Dean and Antoinette Martin, (Hawkes Bay, beef and sheep farmers) who optimize diverse plant growth in their pasture by frequent rotation of grazing animals, without the use of chemical fertilisers (5). Robert and Robyn Guyton (Riverton) are famous internationally for transforming a southland paddock into a sustainable food forest (6). Also heartening is a growing public awareness of the importance of improving water quality. The contamination of rivers and streams that flow through areas of intensive dairying such as the Canterbury Plains has been brought to national attention by scientists such as Mike Joy (7).

According to the UN Secretary-General, António Guterres, the intergovernmental panel on climate change (IPCC) Working Group's report published in August 2021 was was nothing less than "a code red for humanity” (8). NZ has undertaken to reduce its carbon emissions to 50% below 1990 levels by 2050. Methane is a major greenhouse gas and large amounts are produced by grazing animals especially cows. It was reported in 2014 that NZ has the fifth highest per capita emissions amongst OECD nations, largely related to agriculture (9). A paradigm shift is required so that we can move away from reliance on dairying, pasture monoculture and the use of chemical fertilizers and poisons towards organic and regenerative farming practices at this critical time in human history.

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4. Kolakowski BM, Miller L, Murray A, Leclair A, Bietlot H, van de Riet JM. Analysis of Glyphosate Residues in Foods from the Canadian Retail Markets between 2015 and 2017. J Agric Food Chem. 2020;68(18):5201-11.
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In bed with 1080
Response to "Lets put 1080 to bed" Wanaka Sun, Ross Sinclair 2021

Dear Sir,

I would like to make some comments in response to your recent article, "Putting 1080 to bed". Firstly, I would expect that most conservation –minded NZ'ers would be fairly shocked to hear that 1080 actually kills native birds – in any numbers, small or "huge". This unfortunate fact has been well and truly proven in peer-reviewed studies and is termed "by-kill". Which species? Tomtits, robins, morepork and kea to name a few. How many are killed? Contrary to Dr Sinclair, I find the data on kea to be extremely alarming. It has been estimated (by DoC) that each poisoning operation will kill, on average, 12% of kea. But sometimes that percentage has been much higher. For example after the 2020 drop in the pristine Matukituki Valley, 50% of DoC's monitored kea died. "The keas' deaths are likely to be horrific, with extreme muscular spasms going on for hours,"
said Dr Jo Pollard, PhD, an independent scientist who has crusaded for years against the use of aerial 1080.

Personal confirmation of this came to me quite separately from an individual working on a DOC hut during 2020. In the days following a 1080 drop he commented, "the keas were making a really awful noise, it sounded like they might have been screaming …" It is very disturbing that there are so few of these iconic birds to be found now around the West Coast, in areas where they used to be plentiful. DOC says its the stoats. Really? Stoats were introduced more than a hundred years ago. The kea population only seems to have plummeted in the last twenty or so (since intensive and repetitive 1080 drops have been underway in kea habitat). More likely it is something that most definitely kills them in large numbers – 1080.

Ross Sinclair has alluded to the recently published paper by Bomans et al. (NZ Journal of Ecology 2021) investigating the effect of 1080 drops on birdsong. Using bird calls as a surrogate marker for bird deaths has many potential flaws. Birds may call for dying mates and, some time later, start calling again to attract new mates. Leaving those concerns aside, the results revealed that in the subgroup of tomtits, birdsong was reduced in the 1080 group. However, as Dr Sinclair correctly states, for all the bird groups combined, there was no overall difference between 1080 and control groups over a period of years. But hold on, shouldn't there have been a difference? Isn't that what the whole 1080 programme is supposed to do? Bring back the birdsong? Here is conclusive scientific proof that it is a complete waste of time and money, with a lot of dreadful suffering thrown in for many helpless creatures.

Fiona McQueen
Consultant Rheumatologist SDHB and
Author "The Quiet Forest: the case against aerial 1080"

1080: Chemotherapy or Holocaust for the NZ Ecosystem

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Fiona McQueen MD FRACP Pic*
31.08.15 5:15 am
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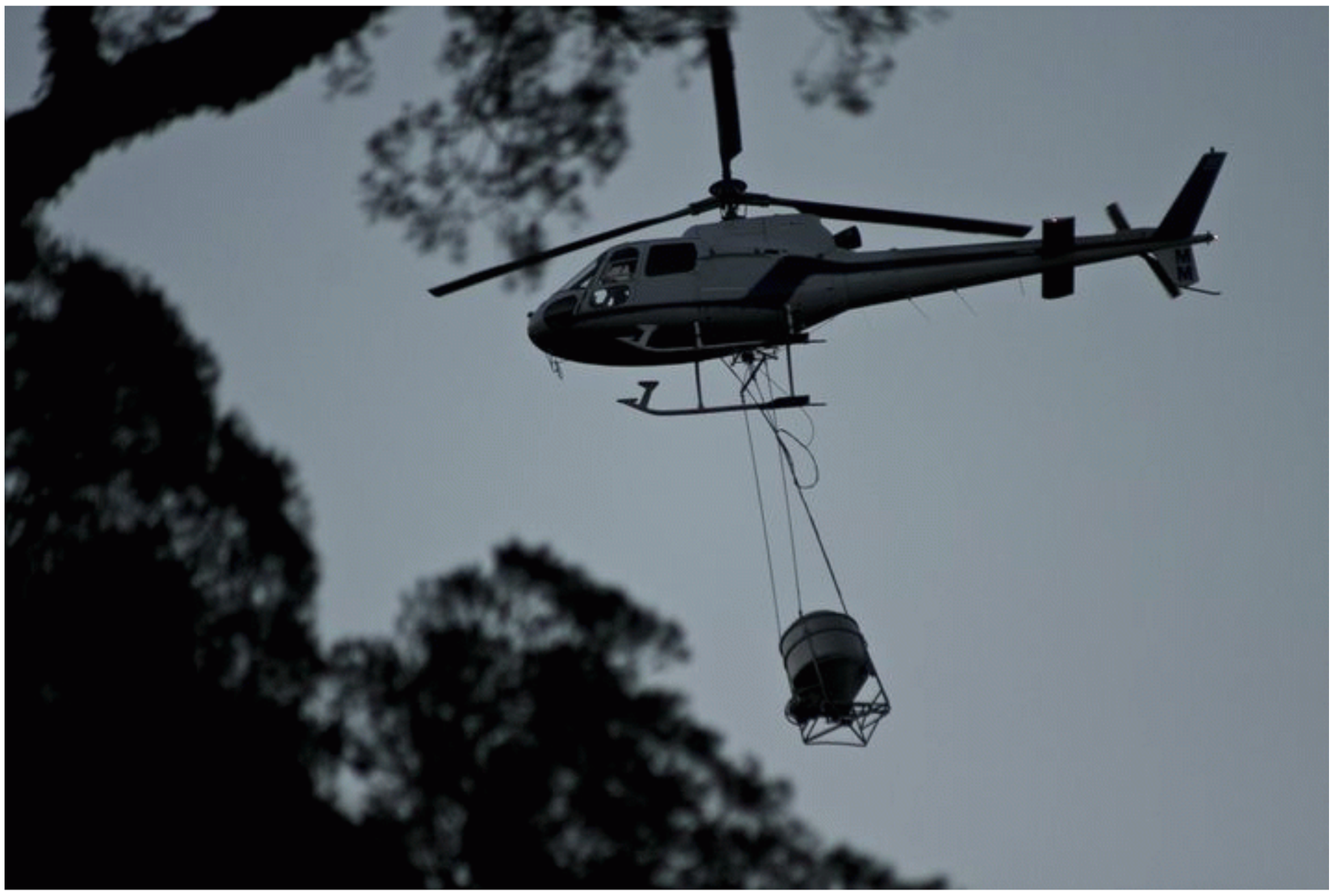

*Pic: A chopper delivers its deadly load of 1080 ... Pic by Clyde Graf

Few topics have caused such a furore within the ranks of government, the conservation lobby and the NZ public in general as the 1080 issue. For many, 1080 is filed away in the memory banks as "old news" and indeed it has been in and out of the limelight since its first use in NZ in the 1950s. But one of the reasons that the 1080 issue does not go away is that it is continuing to be used in NZ forests.

Indeed, NZ uses more than 80% of the world supply of 1080 as it is now banned in Europe its use in the US is minimal. Moreover, 1080 application in NZ has dramatically escalated over the last 10 years, under the stewardship of the Department of Conservation (DOC). The biggest 1080 drop in NZ's history, comprehensively including all the major national park forest areas in the South Island, was carried out during 2014. Furthermore, its use is ongoing, with DOC planning to continue its high intensity airdrop campaign at 2-4 yearly intervals, with the aim of completely eradicating stoats, rats, possums and other predators and to return the NZ forests to their pristine state, "where native birdsong fills the air". DOC has labeled the airdrop "The Battle of the Birds", triggering memories of the glorious Battle of Britain. The burning question for all NZers is "Is this battle appropriate, can it be won and is the "collateral damage" (to use another wartime phrase) likely to be so severe we will wish we never embarked upon it?" The risk we run is that many species of native birds could be wiped out forever, and the entire NZ forest ecosystem be irreparably damaged.

Depending on your perspective, the use of 1080, or sodium fluoroacetate, constitutes either radical chemotherapy, where pain is necessary to allow the final laudable goal of pest eradication (a classic "ends justify the means" scenario), or a chemical onslaught analogous to the holocaust, with the potential to result in ecocide of the NZ bush.

Poisoning "non-target species" including native birds and insects

1080 is highly poisonous to all animals that function using aerobic metabolism (breathe oxygen in the air). This includes stoats, rats and possums as well as many birds, both native and introduced. It is also highly toxic to insects including bees. It disrupts metabolism by interfering with the "Kreb's cycle", a fundamental part of the metabolic process that underpins life in all vertebrates (including man) and many invertebrates. Some animals such as mammals are particularly susceptible to 1080 and this group includes native short-tailed bats, as well as predators such as stoats and possums listed above. However, it is well established that many native bird species including tomtits, fantails, the NZ robin, morepork and riflemen are also vulnerable to 1080, often ingested through eating insects and spiders on the forest floor. These insects or arthropods may take in lethal or repeated non-lethal doses of 1080 and can poison these small forest foraging birds. This is called "secondary poisoning" and has been documented to occur for up to 2 weeks after a 1080 drop. When deer are killed by 1080 (and they are very susceptible) residual poison may remain in their carcasses for >75 days, increasing the risks of secondary poisoning to scavengers. It was concern about this secondary poising that lead to cessation of 1080 use in the US as follows: "sensitive non-target mammals and birds may consume lethal quantities of 1080 from poisoned baits or from consumption of organisms fatally poisoned with 1080 (EPA 1985)". These sensitive non-target species included bees and insectivorous birds as well as livestock that were accidentally caught in the cross-fire.

In NZ, Kea have been found on several occasions to be highly vulnerable. As reported by the NZ Herald and Greymouth Star in 2013: "The Department of Conservation says five out of 39 monitored kea have died of poisoning during the first field study using a bird repellent in an aerial 1080 operation near Otira. DOC has been trialling

repellents after a number of kea deaths from 1080 poisoning. In 2008 seven died in the Franz Josef and Fox Glacier area, and in 2011 seven more died at Okarito. DOC said today results from the recent Otira trial were “disappointing”. “Data on other native bird species are much harder to come by but an influential report by Spurr &Powlesland (1997) entitled “Impacts of aerial application of 1080 on non-target native fauna”, gives details of native birds that have been found dead after 1080 aerial drops and in many cases have been found to contain 1080. These species included weka, kaka, kea, morepork, riflemen, tomtits and NZ robin. The authors stated that more information was needed especially regarding effects on kiwi and weka given the fact that these species that forage on the forest floor are likely to be highly susceptible to secondary poisoning. Aquatic life is also likely to be vulnerable. DOC recently advised that anglers should not eat trout living in streams originating from forest in the central north island where 1080 had been dropped (NZ Herald Sept 27 2014).

Taken together, the evidence suggests that this “chemotherapy” is highly toxic to the ecosystem and dangerous to many native bird species. Is it worth the risk of using the aerial drop 1080 method to eliminate the stoats and possums that predate on the birds? In other words do we run the risk that “the operation was a success but the patient died?”

The effect of 1080 on predators

Nobody doubts that stoats and rats are bad for NZ native birds and the NZ bush in general. The reason given by DOC for the current “hyper-drive” of 1080 use is the recent 2014 beech mast season. When beech trees flower they produce large quantities of seed (masts). This occurs every 2 to 6 years and is triggered by a summer that is warmer than the previous one. Beech seed provides a productive boost and rodents proliferate. These in turn are eaten by stoats, which also then breed prolifically. Unfortunately, to prevent this breeding of stoats, aerial 1080 drops would need to continue forever at 2-6 yearly intervals.

Given that 1080 has been in use since the 1950s, surely there should be some evidence by now that rat and stoat numbers are dropping and native birds are “coming back” if this policy is successful? It is again remarkably difficult to find this information. Anecdotal evidence from Karamea residents after the 1080 drop in the Kahurangi National Park in 2008 suggested that rat numbers actually exploded when they repopulated an area where all their predators such as stoats were eliminated by poisoning. Dr Jo Pollard, BSc (Hons), PhD (Zoology) compiled quotes from NZ scientists on this paradoxical effect on rat populations from 1080 drops as follows: “Mean ship rat abundance indices increased nearly fivefold after possum control and remained high for up to 6 years…the typical outcome for most pulsed possum control is an uncontrolled ship rat population in the presence of a low-density possum population for most of the 3-7 year cycle” (Sweetapple & Nugent, 2007) and “Intermittent control of possums and ship rats may have the nett effect of increasing ship rats for most of the time.” (Innes et al. 2010). There is also evidence that genetically 1080-resistant strains of rat will emerge with repeated poisoning as this has been observed in laboratory rats. What about stoats? Pollard has described aerial 1080 as “a devastating failure” when it was trialed as a stoat control tool within the Tongariro Forest. The manager in question reported “Four months after an effective possum and rat knock-down by a 20,000-ha aerial 1080 operation over Tongariro Forest, stoats reappeared in the center of the forest and began killing kiwi chicks. So far, five of the 11 chicks have been predated, and all in the center of the treatment area”.

Changing predation patterns can also result in more NZ native birds dying after 1080 drops. Again this has been observed and faithfully reported in the scientific literature. Stoats respond to a decrease in the rat population after poisoning by switching to eating birds and invertebrates and the observation has been made that “stoats are likely to have the greatest effect on birds after successful 1080 poison operations”. The fact that stoats happily live adjacent to native forest regions and can easily repopulate from those non-poisoned areas gives the lie to any suggestion that ongoing 1080 drops in national parks will eliminate them. DOC’s reply to this recently has been to extend 1080 drops to the fringes of human habitation such as into the Hunua ranges near Auckland (a water catchment zone, raising another whole host of concerns). Walking a dog in a forest that has been treated with 1080 or even allowing it to run on adjacent land is fraught with danger for the animal. A recent DOC plan to drop 1080 on Mount Roy near Wanaka was only deferred recently by concerned, animal-loving residents.

Animal ethics

One of the groups most vociferously opposed to the use of 1080 are the animal rights campaigners. It is beyond doubt that death by 1080 is prolonged and pitiful, often lasting several days. In addition to wildlife, many cases have been reported where livestock, horses or dogs have been accidentally poisoned after a 1080 drop and devastated owners have had no choice but to euthanize these animals as there is no antidote. Is it ethically justifiable to poison any creatures in this way? Stringent codes of ethics have been formulated to protect the rights of animals used in medical research and these are upheld by animal ethics committees at all our major universities. Similarly, practices for slaughtering deer that have been farmed for their venison or velvet are tightly regulated. The NZ Animal Welfare Act of 1999 states that an offence is committed if an animal is killed “in such a manner that the animal suffers unreasonable or unnecessary pain or distress”. Why is this legislation ignored when animals including deer and native birds are killed in the wild by 1080? It seems as though these ethical considerations are laid aside when DOC strides into battle.

What about our tourism image? Clean and Green?

It is a little known but indisputable fact that 1080 drops have occurred in the direct vicinity of the Great Walks. The Routeburn and adjacent Dart and Caples valleys were targeted during 2014. These drops are not advertised or mentioned in written material in backcountry huts other than in a vague manner as “A range of pest control methods are used by DOC, depending on the scale and urgency of the pest problem”. Given that 1080 use has been banned in Europe and its very limited use in the US is tightly controlled, there could be consternation amongst our many foreign visitors if the scale of 1080 use in NZ was truly appreciated. It is also hardly credible that no notification is given after such airdrops, to advise that trampers should not drink water from streams in the area. Although the risk of direct contamination is low, a poisoned deer carcass could be lying upstream out of sight, tainting the water and causing a human health hazard. Perhaps there are pregnant trampers? 1080 is a known teratogen in mammals. While this has not been proven in humans due to the obvious lack of clinical trials, this could hardly be regarded as reassuring.

How could DOC be wrong?

It is at first sight almost impossible to believe that DOC staff, who include highly regarded and well-intentioned scientists could be so wrong. This is the reason why the 1080 debate so often disintegrates into an expert-vs-expert confrontation that leaves the ordinary person none the wiser. Angry, gun-toting backcountry hunters clad in swannies and muddy boots do not look convincing when pitted against sombre scientists in the media. However, it is worth remembering that human history is littered with examples of the so-called intelligentsia being "wrong" for long periods of time, with sometimes appalling consequences. There are many medical examples ranging from the enthusiastic endorsement of smoking by physicians in the 1940s and 50s to the widespread use of thalidomide to treat morning sickness during the 50s and 60s. Large payouts to aggrieved patients have occurred more recently after certain arthritis drugs were found to be associated with premature cardiac death and the list goes on.

The scientific community underpinning DOC must include ecologists, zoologists, entymologists and botanists. Such individuals are surely more likely to "run with the pack" than risk not only job loss but widespread vilification and professional suicide if they take an unpopular stand. Thus, a collective blindness may ensue where nobody is prepared to raise their head above the parapet and argue. The old story of The Emperor's New Clothes describes such a scenario. The fact that the 1080 pest eradication programme is now a 100 million dollar/ year industry does not help. It is hard to take a stand against such an entrenched view.

What else can be done?

We could leave things well alone. This would avoid the 1080-associated consequences of rat plagues and stoats prey-switching to native fauna. Eventually the ecosystem would return to the pre-1080 days when there were in fact birds in the NZ forests. Keas were very plentiful right up to the 1980s.

Stoats were originally released into the NZ bush in round 1870. Rats had been here a much longer time than that. Some sort of homeostasis must have become established over the first half of the 20th century and this is what would eventually return if the 1080 campaign was abandoned. Ground control (eg stoat trapping and cyanide at bait-stations to kill possums and rodents) remains an option. A bounty on stoat tails was a 1950s solution that could be re-examined. Nothing can achieve the coverage of the aerial 1080 drop but if it doesn't actually work in the long term then there is no justification to continue. It is a little like the universally accepted technique of blood-letting in the Middle Ages. It conformed with the concepts of disease that were accepted at the time and continued for hundreds of years because of this. However, it must have actually contributed to the death of many patients.

Do the ends justify the means?

The "ends justify the means" was a phrase in common currency after the 2nd world war as commentators strove to make sense of the rise of the 3rd Reich and the slaughter of German Jews. It was a phrase that was used to justify the Nazi philosophy of eugenics whereby it was contended that the ends (purification of the Aryan race) justified whatever means were required to achieve it. Visitors to a Berlin Holocaust museum in Cora-Berliner-Straße can see for themselves how the methodical elimination of the Jewish people was achieved. Wall maps show the distribution of the 1200 concentration camps dotted around Germany in the early 1940s (many more having been established in the occupied countries). The impression given is of meticulous planning, which must have been conducted by many individuals who unquestioningly followed the party line. The 1080 drop maps that document the careful inclusion of the entire south island national park estate give a similar impression of thorough coverage and careful planning to an almost obsessional degree. If this results in the elimination of pests and the rebirth of birdsong in our forests how happy we will be, but the consequences if DOC is wrong are frankly appalling. Meanwhile our forests remain strangely silent.

Fiona McQueen MD FRACP *is Professor of Rheumatology, University of Auckland and Consultant Rheumatologist Southern District Health Board*

All about Fiona McQueen

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Comments (20) *Show Comments*

1080 not answer to saving NZ birds

Thu, 17 Mar 2016

Opinion

It's time to think again about aerial 1080, Fiona McQueen writes.

Work progresses on a Department of Conservation 1080 poisoning programme in the Mt Aspiring National Park near Wanaka in 2014. Photo by Mark Price.

Something you don't expect to find when tramping through pristine native New Zealand forest are carcasses of poisoned animals and native birds lying on the ground. Yet this was the experience of trampers in Fiordland following the massive aerial 1080 pest-control campaign of August 2014. A group of Glenorchy locals was walking the Caples-Greenstone track, two weeks after the poison drop.

As one of them recalls: ''There were dead birds on the ground.''

The others were hunters, exploring the remote Hokuri creek, near the Hollyford valley. Although this was three months post-1080, they found deer carcasses, dead possums and native birds on the ground. These people witnessed something deeply disturbing. Our current pest-eradication policy has also excited adverse comment internationally.

Two articles recently appeared in the Biodiversity column of *The Economist* noting that invasive species are ''fiendishly hard to eradicate'' and that ''NZ will not eradicate rats (using poison) any more than Britain was able to wipe out grey squirrels''.

The author commented that the idea it is possible to restore the balance of nature to what it was before human intervention is at best ''misguided''.

There can be ''no return to Eden''.

For those who wish to learn about 1080 there is much information from the Department of Conservation on the internet. It is often referred to as a ''rodenticide''.

This misrepresents the fact it is toxic to all vertebrates including birds, as well as many invertebrates.

Typing in ''Does 1080 kill NZ native birds?'' elicits the following: ''Tomtits and robins are the most vulnerable native bird species,

but as they are prolific breeders they recover quickly and thrive as a result of the reduced predation that follows successful 1080 operations.''

I personally do not find this reassuring. The answer is clearly ‘‘Yes''.

The information about the kea, now an endangered species, is even more disturbing.

‘‘Of the 150 kea that have been directly monitored, 20 (12%) have died after having ingested baits.''

Given that the total NZ (and world) kea population is now estimated at less than 2000, this surely represents an extraordinarily cavalier approach. The kea was given full protection under the NZ Wildlife Act of 1953.

That a government department charged to preserve and protect native species is deliberately dropping poison into its habitat beggars belief. In the 1970s, kea were still thriving on the West Coast.

The devastating fall in their numbers during the past 30 years has coincided with the increasing and repetitive use of aerial 1080 in that region.

One of the main justifications given for the 1080 campaign is that reducing predators will benefit native birds. However, ecosystems are complex and simple knock-down of rats may have far-reaching effects. For our native fauna, 1080 can cause direct poisoning, termed ‘‘by-kill''.

This means a slow death, not just for tomtits and robins but many other vulnerable species including kea, kaka and insects. There is no known antidote. It was concern over by-kill that caused the Environmental Protection Authority to cease widespread 1080 use in the US in 1985.

Bird survivors of the initial onslaught will benefit from reduced rat numbers the following year with improved breeding success but after two to three years rat numbers bounce back to pre-drop levels and may overshoot.

A rat plague was reported in Karamea following the 2008 1080-drop in Kahurangi National Park. Rats have extraordinary fecundity: a characteristic of many invasive species.

A breeding pair can produce more than 1000 offspring per year, compared with kea, which lay only two to five eggs per season. Stoats are decried as one of the greatest threats to native birds but they are fastidious carnivores and often do not take 1080-bait.

However, they eat rats. The balance between species is critical and when rats are reduced immediately post-1080, stoats can switch to preying upon birds.

The ultimate result of repeated poison drops could well be a forest full of rats and stoats with very few native birds.

There are many other concerns about 1080; its persistence when dropped into cold environments, its proven toxicity to aquatic life and its mutagenicity in mammals.

The case against using this chemical indiscriminately over vast tracts of native forest (some of which borders our own cities and contains their water catchments) is very strong.

How then should we control pests? Aerial 1080 is touted as the most cost-effective method but the current programme consumes $60 million of taxpayer money. Opossums were deliberately introduced to NZ to establish a fur trade and the merino-possum clothing market makes this a viable option today.

However, possums killed by 1080 are currently left to rot on the ground, providing a source of secondary poisoning. The fur itself is wasted.

An alternative strategy would be to incentivise possum trapping, boosting the fur industry and relieving unemployment in areas such as the West Coast. This could be achieved without the grim reality of ‘‘by-kill'' and allow our international ‘‘clean and green'' image to regain some credibility.

• *Fiona McQueen is Professor of Rheumatology at the University of Auckland and a consultant rheumatologist at the Southern District Health Board.*

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Submitted by My Real Name on Fri, 18/03/2016 - 11:55am.

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Fiona McQueen

Submitted by My Real Name on Fri, 18/03/2016 - 11:46am.

Fiona McQueen is a scientist, yet does not appear to have read the vast body of scientific literature that completely disproves almost all of the assertions she makes.

She is speaking publicly, in her capacity as a scientist, on an issue of which she has no professional interest, an action that is outside of which is considered ethical by almost any other scientist.

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Ground-nesting birds

Submitted by jphilip4 on Thu, 17/03/2016 - 9:18pm.

Thanks Fiona for the article. It is so important to highlight this issue, and to be aware that the international community do not share NZ’s enthusiasm for 1080.

It is worth considering too, that Australia had a thriving population of ground nesting birds before broad scale poisons were used on the environment (dating back to 1814). These birds — malleefowl, curlew, brolga etc.- survived alongside a country full of egg and bird eating predators that NZ does not have to contend with (snakes, large reptiles, numerous carnivorous
mammals). These species were deeply embedded in Aboriginal cultural traditions of care and protection.

We need to look at ways to protect, not wage war, on the environment.

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1080

Submitted by robu on Thu, 17/03/2016 - 6:40pm.

Interesting that someone with academic qualifications has so little respect for reading and understanding the current scientific knowledge on pest control in NZ and the effects of 1080.

Perhaps she could take time to read some of the info in the PCE report on 1080. >>Link<<

1080 is a control method, it isn't there to wipe out rats like she states.

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Dave Hansford

Submitted by Marye on Thu, 17/03/2016 - 5:44pm.

Dave Hansford.

What an amazing, inaccurate diatribe from you Dave. It is

not even on subject, please re read the well-balanced piece from Professor McQueen.

»

Everyone's an ecologist

Submitted by Dave Hansford on Thu, 17/03/2016 - 1:44pm.

Just what the 1080 conversation needs: another rheumatologist trying to lecture us on ecology and toxicology.

As a medical professional, McQueen should understand the protocols around this: if she can "prove" 1080's toxicity to aquatic life and its mutagenicity in mammals, she is required to reference it. She is also bound to expain what she means by "toxic". Salt can be toxic. Green potatoes can be toxic. If she means 1080 is killing aquatic life, she is required to prove that - but she's going to have trouble: there is nothing in the literature that demonstrates fatal toxicity to "aquatic life". She's mistaken, too, when she asserts that 1080 is a mutagen. Studies have found that it is not. She's confused mutagenicity with teratogenicity - not something I'd expect from a woman of medicine. And if she can point to any empirical evidence of a poisoned kaka, I'll send her a box of chocolates.

It would be helpful if people got their facts straight before going public with their anti-1080 agendas - and offered hard evidence, rather than hearsay, anecdote and fallacious fearmongering.

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Thank you

Submitted by Marye on Thu, 17/03/2016 - 12:46pm.

Thank you Fiona McQueen for your careful and balanced article. The only tiny thing I would say is that kea seldom raise young year after year, breeding rather 2 years out of 3.

Also that in the Okarito Forest in 2011/12 almost 80% of adults monitored in this former production forest, died. Some of these dead birds were adults which were nesting that year, young and eggs were lost too but this was not recorded by the Department of Conservation at the time.

The whole drop including 2 other forests dropped the monitored kea deaths to a figure of 21%. That is the admitted death rate by the Department.

We submitted an OIA request about their monitoring at the time and had a University Graduate work on the figures, which is how we came to these figures for South Westland. It should also be noted that while kea habitat may be considered the whole of the South Island , deaths are higher in the richer feeding grounds adjacent or in mixed podacarp area.

1080 has "incidental deaths" for those who use the poison, that is of native species, but for those who live, work or walk in the areas following 1080 use, the scene is far more serious. 1080 has been used long enough. It is time to stop, Ban 1080 now.

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