Predator Free 2050

Social and ethical challenges

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Report produced for Predator Free 2050 Limited

Summary

1 Background and Methods

This research sought to understand what New Zealanders might object to or disagree about in relation to Predator Free 2050 (PF2050), why, and whether any pro-active resolutions are possible. This report describes findings from the qualitative component of this study, involving interviews with 59 participants, and in-depth discussions and participant-observation with a further 17 people. Participants included Māori, conservationists involved in PF2050 and other relevant projects, critics of PF2050 and members of interest groups, researchers, and government staff (e.g., biosecurity specialists from councils). A pseudonymised list of participants is provided in appendix **??**.

While PF2050 is focused on eradication of rats, possums, and mustelids, issues discussed by participants often related to pest control in general, whether eradication or suppression. This may reflect that most conservation groups are currently focused on suppression, even if eradication is the longer-term goal.

2 Land access

Participants indicated that rat eradication in particular may require access to 100% of private properties, if current technologies are used. Refusal of landowners was described as common in predator control and eradication projects, and raises questions about why access is refused, how landowners might be persuaded, and what is the right thing to do if they are not persuaded.

Reasons land access is refused included objection to toxins, mistrust of institutions (specifically or in general), privacy concerns, disagreement with the ethics of predator control/eradication (less commonly), and unpredictable reasons, e.g., community tensions.

Methods identified as effective for **persuading landowners** included endorsement from neighbours and trusted locals, perceived independence of the predator control/eradication project from government, and attentive listening to landowners' concerns. Accommodation of landowners' concerns was advocated possible, e.g., use of trusted locals on property. However, participants warned of the risk that accommodations may undermine technical feasibility.

Participants reflected on the **social and ethical implications of compelling landowners**, if persuasion does not succeed. Compulsion using the law was observed to cause social issues, with participants making comparisons to vaccine mandates. Participants held differing views on the ethics of using the law for dissenters. Some felt, for example, greater comfort with use of the law where there is a clear majority in favour, e.g., over 75%. There was a perceived greater social and ethical acceptability where motivation comes from within the community rather than from external parties.

3 Eradication methods

Because both current and future tools could be used in achieving PF2050, the social dimensions of both were discussed with participants.

3.1 Current tools

Participants reflected on **opposition to 1080**. It is unclear whether opposition is reducing. Concern about 1080 opposition still shapes conservation practice, e.g., reluctance to use the toxin or to use proper signage. Māori and hunters were identified as especially likely to be concerned about 1080. An opponent of 1080 identified a split in the movement over COVID-19 vaccine mandates. An animal welfare advocate was concerned that 1080 opposition is rarely about pest suffering.

Participants also reflected on strategies for **communicating about 1080**. They emphasised that building trust over time is key. First-hand experience may help persuade of 1080's benefits, but opponents of 1080 argued that direct experience shows its harms. Opposition to 1080 may not be "science denial" as is sometimes claimed, e.g., it could reflect differing values. Productive communication requires both sides to listen and take each other's views seriously to find common ground.

Participants also wanted to talk about **brodifacoum**. Brodifacoum was viewed as riskier for animals and environments than 1080, but with a less negative public perception. Participants were concerned about overuse of brodifacoum by publics and some professionals, posing risks to animals and environments, and to eradication through sensitisation of target animals to the toxin. For these reasons, some participants advocated for requiring a licence for brodifacoum. However, there was concern that a licensing change would cause 1080-like opposition. Public concern about brodifacoum could already be increasing.

Licensing of current tools was also a concern, with participants noting a lack of readily available toxins (i.e., those that do not require a licence). This lack of availability was attributed to changes in licensing, or licence processing time. This was identified as a particular problem for cyanide, which was used widely by farmers in the past but was proposed to be less so now.

Finally, participants reflected on the **regulation and testing of traps**. Traps, unlike toxins, are often presumed to be humane, whether that is true or not. Participants sometimes argued that National Animal Welfare Advisory Committee (NAWAC) testing should be mandatory, rather than voluntary as it is currently. Some participants were concerned about NAWAC testing reliability, meaning that NAWAC-approved traps may not kill humanely consistently. Inhumane kills were viewed as off-putting, especially for urban backyard trappers concerned about humaneness. For this reason, some PF2050 groups are seeking more assurance about humaneness of traps.

3.2 Future tools

Participants reflected on the benefits and risks of **genetic technologies**. Genetic technologies were often viewed as important for reaching PF2050 and as beneficial in other ways, e.g., reducing animal suffering. However, genetic research has been legally difficult, although this may change soon. There were concerns about both technical and social feasibility of genetic techniques.

Some reflected on **challenges relating to developing new tools**. It pointed out that it takes considerable funding and time to develop and study new tools. Some queried whether resources could be better spent elsewhere, or wished to debate which novel tools should receive development funding. Some were concerned that new tools can be over-hyped. Finally, some participants emphasised that animal welfare and intellectual property (e.g., where mātauranga Māori is used) should be kept in mind during tool development.

4 Communications and discourses

Some participants, particularly animal welfare advocates and researchers, wanted to discuss public communications and discourses relating to **animal welfare**. They expressed concern about cases where predators are demonised or objectified, and requested more acknowledgement of the harms involved in killing introduced predators, even if they agreed that killing is on balance the right action. It is unclear whether nuanced messaging of this sort could bring on board members of the public concerned about animal welfare.

Participants reflected on the benefits and drawbacks of using **images of dead animals** in communications, which were viewed as offensive to some people and therefore inappropriate for broad audiences. There was therefore a common preference for focusing on outcomes (e.g., birds returning to an area) in communications for broad audiences. However, outcomes may take considerable time to become visible. Images of trapped animals may also be important for community groups to keep up morale, showing that their efforts are worthwhile. Such images were also sometimes viewed as a form of transparency, showing that killing is necessary to achieve biodiversity outcomes.

Many participants also reflected on the use of **metrics** in communications, for example numbers of animals killed. Many pointed out that the number of animals killed does not tell you how many are left and is therefore of limited use. However, kill counts may be motivating for community groups in a similar way to images of trapped animals. Kill counts can also provide useful information, e.g., about trap efficacy and potential improvements.

Transparency was regularly highlighted as essential in communications, and was viewed as essential for building trust. This is especially true around controversial issues, e.g., toxins. Participants observed that transparent information should be comprehensive and understandable. They also pointed to a need for transparency around scientific uncertainty, i.e., it must be clearly communicated what is not known.

5 Māori perspectives

Māori participants emphasised the diversity of views among Māori, which are often lumped together. With that said, several key themes did emerge as particular concerns for many Māori, most significantly relating to **governance and decision-making**. There was a perception that consultation about national decisions with relevant Māori happened after, not before, the announcement of PF2050. While this may be normal for policy development, participants observed that this could be off-putting for some Māori. There was a perception that steps have been made towards shared decision-making around PF2050, but Māori participants often advocated for more.

Māori participants reflected on the use of **mātauranga Māori**, which was often viewed as potentially valuable for PF2050. However, participants were also concerned about co-optation and misappropriation. Participants also emphasised the importance of ensuring that Māori are not made to feel ashamed if they lack expected knowledge or values.

Participants also reflected on issues around **mistrust of government institutions**. Difficult histories were viewed as affecting current relationships between Māori and government. Particular sources of tension highlighted were making decisions or announcements prior to consultation with Māori, and high turnover of government staff.

Participants observed that Māori groups are short of **time and resources**, meaning they may have more important concerns than PF2050 and struggle to take part even if they support it.

Finally, some participants referenced unique **Māori worldviews and concepts of conservation**, which might not align with Western concepts. It was observed that Māori may support or oppose PF2050, but sometimes for their own unique reasons. For example, cultural harvest could motivate both support and opposition. These views may not always align well with those of other conservationists.

6 Labour

6.1 Volunteering

Participants frequently spoke the **benefits of involving volunteers** in working towards PF2050. These include more people doing the work, for low cost, particularly on private land and into the future, and encouraging community buy-in, with volunteers often acting as advocates for PF2050. Participants also reflected on benefits for volunteers, such as developing connections with nature, socialising, and building skills and knowledge.

However, **organisations identified challenges relating to volunteers**. While some volunteers were recognised as highly skilled, some spoke of cases of volunteers misusing bait and traps, posing risks to non-target animals and organisations' reputations. Participants spoke of the need to balance showing respect for volunteers' autonomy and skill, while overseeing their work to mitigate these risks. There may also be a need to persuade volunteers to change long-standing practices, e.g., stop using bait to avoid educating target species, requiring adept community engagement. There was agreement that eradication work is too intense and difficult to rely on volunteers. Some also reflected that even where volunteers could do the work, paid professionals are more cost-effective given the time and resources required for volunteer management. Participants also reflected on the future of volunteering, particularly the need to recruit younger volunteers and to transition groups to biosecurity post-eradication, which might be less appealing than trapping.

Volunteers also spoke of challenges from their perspective. Volunteers spoke of the difficulty of securing permission to work in government reserves, even if no other predator control in the reserve is occurring. They also identified a heavy paperwork burden, which risks burnout and the collapse of volunteer groups. They talked about difficulties in securing funding, even if working long-term in an ecologically sensitive area, which may be a growing challenge with the increasing number of volunteer groups across NZ. Finally, some concerns were raised about attribution theft, when agencies take credit for volunteers' work.

6.2 Professional predator control

Professional predator controllers (hereafter, trappers) reflected on the diverse **skill set required for their work**. These include willingness to handle dead animals, which is off-putting for many people; high levels of physical fitness; and tacit knowledge, built from long-term experience, of target animal behaviour and working in the bush. At the same time, trappers require skills in business management,

as they are typically expected to be contractors, and substantial paperwork skills, including keeping up to date with legal compliance, particularly for working on public conservation land.

However, trappers reflected on **challenges relating to their work**. These include a high paperwork burden, which is challenging for many potential trappers with other relevant skills, and high levels of both physical and professional risk, e.g. late payment and loss of toxin/firearms licences from unrelated offences. Trappers reflected that legal compliance needs constant attention with changing regulations. Despite these challenges, conservation grants and the fur industry are volatile, making income precarious, and pay is typically lower than for competing professions, e.g., for tradesmen.

Trappers perceived that **their work is undervalued**, with the nature of their skills being poorly understood and valued. Some organisations reported that there is a shortage of trappers, but for others this results from unreasonable expectations. There was a perceived over-reliance on volunteers and unwillingness to pay for pest control, despite volunteers being unable to carry out eradication due to the nature of the work. Finally, there was a perceived need to change the trapping industry to make it more attractive.

7 Other species

Predator Free 2050 targets three taxa: rats, possums, and mustelids. However, participants often either wanted to talk about species beyond this scope and the prospect of their future eradication, or indicated that their communities want to talk about other species.

Hunting advocates reflected on the value of **game animals**, including providing food for low-income and rural communities. They also reflected on the concerns of hunters, including that toxins will affect game or hunting dogs. While some hunters were viewed as potentially opposed to PF2050 goals, more commonly hunters were expected to support it, with a motivation for many hunters being connection with the outdoors. Hunters were reported to be worried about scope creep and the prospect of eradication of game species. However, some hunters support reduced populations of game species, and this may be a more socially acceptable route.

Cat advocates also reflected on the value of cats and concerns about the prospect of culling them, given that for many New Zealanders they are valued companions. Feral cats are widely culled, and this is not opposed by most cat advocates so long as it is done humanely. However, cat advocates define "feral" narrowly, while some conservationists tend towards presuming that any cat in a conservation reserve is feral. Cat advocates worry that PF2050 gives social licence to kill stray and ambiguous cats. The debate here would appear to not be about whether feral cats should be culled, but the definition of "feral" and management of strays. Further detail on these findings can be found in a journal article derived from this research [3].

Some participants suggested that PF2050's **scope should remain narrow**, and eradication of other species should not be on the table, on the basis of social licence or practical issues (e.g., limited funds).

Others, however, advocated for **expanding PF2050's scope**, or reflected on how other species are already targeted as part of other campaigns. Other species like cats are sometimes already targeted in suppression or eradication campaigns, although this may not be widely publicised. Some participants would like other species featured in PF2050, or, alternatively, better funded for eradication or suppression, due to their ecological damage. Some believe that PF2050 is a starting point, opening up discussion of other species later. Many participants were concerned about eradications of PF2050 target species leading to increases in other pests, e.g., mice and rabbits, in turn causing both social and conservation challenges.

8 Funding and governance

Funding was viewed as crucial for PF2050's success. Inadequate funding was viewed as already causing problems, e.g., lack of predator control in DOC reserves. Concerns were raised about the short-term nature of much conservation funding, which may lead to pest numbers increasing after funding ends, undermining past efforts. Some important activities were perceived as under-funded, e.g., administration required to successfully run community groups. Some participants were concerned that funding is not necessarily given based on the greatest need or track record, or that funds may be spent inefficiently.

One particular area that was more frequently identified by eradication specialists as important but under-funded was **biosecurity**, which was seen as essential: without it, they reported, eradication

should not be attempted. There were calls for both more funding for biosecurity and for more detailed plans, for example on how to hand over responsibility from central government to local government or the community.

Participants reflected on the importance of **collaboration**, and barriers to it. Challenges were perceived as arising from attempts to reconcile different systems and programmes in place between organisations. High turnover in organisations may compromise building personnel capacity and collaboration. Some were concerned that government agencies seek to retain power even when working as equals with other types of organisations. Political tensions between agencies were viewed by some as inhibiting collaboration. Despite these challenges, collaboration was often viewed by many as necessary and beneficial.

Finally, some participants perceived issues with **management of government agencies**, for example a lack of on-the-ground experience.

9 Education

Because PF2050 requires support over a long period, education of children is often viewed as an important part of the programme. However, there have been debates about whether, and how, to do this. Many participants for this research were involved in predator control education, for example giving presentations in schools about PF2050 and their work. To further explore this issue, **additional research** was undertaken in collaboration with Dr Sally Birdsall and others, involving 16 interviews with 18 participants, including teachers, animal welfare advocates, and other environmental education providers and curriculum developers. A pseudonymised list of participants is provided in appendix **??**. Further detail on these findings can be found in a journal article from this research [1].

Participants from both of these projects reflected on **why they teach about invasive species**. These included encouraging young people to protect native biodiversity and demonstrating how they can contribute; improving young people's well-being and career prospects; sharing environmental learning with families and communities; and offering transparency about invasive species management and a chance for young people to ask questions.

Participants also spoke about **how they deliver teaching** on invasive species, and **barriers** to doing so. Most commonly, delivery involves short programmes with classroom presentations and small-group trapping excursions. Typically, programmes are led by an enthusiastic teacher or principal, risking collapse if that individual leaves. Teachers' limited time often means that external groups are involved in programme delivery. Barriers include limited time, cost of equipment, and lack of training in trapping and teaching this difficult subject.

Those involved in teaching overwhelmingly described emphasising that **invasive species are worthy of respect**. This involved saying that pest animals are not bad, just in the wrong place, and valuable in their own right and in their country of origin. Two participants viewed this respect-focused messaging as a change from previous approaches. Participants also emphasised the need to teach that killing is serious. While critics have highlighted the risk of reducing children's empathy, some participants viewed involving children in trapping as potentially countering media representations that trivialise death, thereby enhancing empathy.

Participants agreed that **supporting predator control must be a free choice** for children, but disagreed about what this involves in practice. Some argued that it is acceptable for teachers to present an argument for one side, while others argued that students must reach their own conclusions independently. There was agreement that trapping must be voluntary, with alternative activities offered.

Participants spoke of teaching differently depending on the **religious, cultural, or geographical context** of students. Participants often incorporated te ao Māori approaches, either for all students or multicultural groups. Teaching may be easier in communities where conservation is widely supported. Many argued that teaching in rural areas is easier as children have prior exposure to trapping, although two participants argued that teaching respect-oriented trapping can be more challenging in rural areas if students are accustomed to hunting for fun rather than a serious purpose.

Participants also reflected on how teaching and learning differ depending on the **age and gender** of children. Participants suggested that boys on average are more excited by trapping than girls. There was agreement that children of all ages can be age-appropriately taught about invasive species in classrooms. However, there was disagreement about the appropriate age of involvement in trapping, with minimum suggested ages for trapping ranging from preschool to high school.

10 Risks and benefits of failure

Even PF2050 advocates acknowledge eradication targets may not be achieved. Participants suggested that it is **important to talk about failure**, for increasing PF2050's chance of success and balancing hope and realism in conversations with communities. Yet participants were sometimes nervous to speak publicly about failure. For a more in-depth discussion of this theme, refer to a paper on this subject drawing on this research [2].

Ecological and financial benefits of a failed PF2050 include the benefits to native species/ecosystems from amplified predator suppression and near-eradication. However, **risks** are that less ambitious targets could have been more cost-effective or ecologically beneficial (e.g., a larger/more ecologically significant area treated).

Benefits for individual animals include reduced suffering and death of native animals that would have been harmed, if predators numbers are reduced even if not eradicated;

Individual animals, both targeted predators and native animals, may benefit from PF2050, even if eradication is not achieved. For predators, less killing would be required if species are eradicated, or if populations are significantly reduced and maintained at low levels. Native animals may also experience less death and suffering from predation, if predator populations are significantly reduced. Novel tools developed through PF2050 could also reduce suffering for both predators and non-target animals, although novel tools could also theoretically introduce new harms. However, **risks** include that more death and suffering are imposed on animals than required to achieve the ultimate outcome. This could occur if initial harms imposed from eradication are higher than for suppression (e.g., larger volumes of bait and hence more death and suffering), and projects are abandoned.

Social benefits include that PF2050 may increase involvement in trapping, and hence the social benefits that arise from it, and enhance community connections and pride in the local area. **Risks** include causing "trauma" following attempted (even if not successful) eradication in a divided community, and disappointing supporters after raising their expectations, leading to burnout and cynicism.

11 Conclusion

Participants emphasised that **social dimensions of PF2050 are of central importance**, and that social licence is difficult to secure and easily lost.

On some issues, participants proposed **potential resolutions** for consideration, such as:

1. Building trust between PF2050 projects and communities through transparent communication and taking the time to listen to and, where possible, accommodate their concerns.
2. Making controlled substances licence applications, particularly for cyanide, cheaper and quicker to process.
3. Considering making NAWAC testing mandatory for traps, and ensure clear communication about what NAWAC approval means.
4. Either providing more assistance with paperwork, or reducing the amount of paperwork, for community groups and professional pest controllers.
5. Considering creating more secure funding streams, at least for high priority areas or projects.
6. Creating better incentives to encourage people to become professional pest controllers.
7. Tailoring communications to the intended audience, recognising that images and statistics relating to dead animals may be distasteful or misleading, but important for community trapping groups.
8. Continuing to work towards leadership of mana whenua in PF2050 projects and appropriately using mātauranga Māori.
9. Managing at least some game animal populations to low levels, as this could be both socially acceptable and valuable for conservation.
10. Humanely culling unambiguously feral cats, to which even cat advocates may not object.
11. Preparing detailed post-eradication biosecurity plans and allocating greater funding towards this.
12. Teaching respect for all animals, including introduced predators, in education focusing on invasive species.
13. Opening up discussions about risks and benefits of PF2050 if eradication targets are not reached.

However, other issues may require further discussion or research, and even then may not be resolvable. **Outstanding questions** include:

1. What level of public support is required for PF2050 to be ethically and socially justified, particularly concerning use of the law to compel access onto private property?
2. Are tensions around toxins, especially 1080, resolvable, and if so what does resolution look like?
3. How should the use of genetic technologies proceed in light of potential social concerns?
4. Should greater nuance about the harms involved in PF2050 be incorporated into public communications, and, if so, what would this look like? Inspiration could come for example from the education sector, where a consensus is emerging around respect-focused messaging.
5. How best can Māori and Western concepts of conservation be aligned?
6. Is there an over-reliance on community volunteers compared with professional pest controllers, as some participants argued?
7. How should stray and companion cats be managed?
8. Is it useful or appropriate to bring feral cats, game animals, or other species (e.g., mice) under PF2050?
9. How should funding be allocated in light of the numerous community groups requiring support, calls for greater attention to high-priority areas, and other debates about funding?
10. At what age is it appropriate to directly involve children in trapping?
11. How can social, ethical, ecological, and financial risks be mitigated in the event that eradication targets are not met?

References

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[3] Alexandra Palmer and Virginia Thomas. "Categorisation of cats: managing liminal felines in Aotearoa New Zealand and the United Kingdom". In: *People and Nature* (). DOI: 10.1002/pan3.10519.