Holding Discomfort: Reducing Polarisation Around Killing for Conservation

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KILLING FOR CONSERVATION, INCLUDING INTRODUCED SPECIES MANAGEMENT, IS OFTEN talked about in black and white terms (Warwick). Polarisation—the framing of disagreement in 'oppositional, often binary, terms' (Crowley et al., 'Conflict in Invasive Species Management' 134)—potentially arises in relation to both whether to kill for conservation as well as how to do it. On the former point, those in favour sometimes use military metaphors and demonisation to support the case that killing is necessary and morally right (Holm; McCrow-Young et al.; Potts; Souther; Steer; Robin). For example, Robin writes of how volunteer efforts to kill cane toads in Australia (known as 'toad busting') is regularly represented as 'a national duty', such that it 'becomes heroic to eradicate the ugly animal' (18). Similarly, Atchison writes of how introduced carp in Australian freshwaters are 'discursively transformed as pestilence and objects not worthy of care', described using terms such as 'trash fish' and 'filthy mudsuckers' (739). Conversely, some view killing introduced species as morally wrong. While there is variation among proponents of 'compassionate conservation'—an ethic pioneered in large part by Australia-based philosophers, such as Arian Wallach (Wallach, Batavia, et al.; Wallach, Bekoff, et al.)—there is a strong tendency towards non-lethal methods (even if they are ineffective for conservation or harmful in other ways), and some proponents of this view explicitly regard killing as fundamentally wrong (see commentaries in Beausoleil; Rohwer and Marris). Killing as wrong is sometimes also implied, if not explicitly stated, where war metaphors and demonisation are

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criticised by critical animal studies scholars. For example, writing of the Australian brushtail possum in Aotearoa New Zealand (NZ)—which was introduced to create a fur industry, but has become an ecological and agricultural pest—Potts writes favourably of art that represents 'an alternative possum-advocacy discourse', while McCrow-Young et al. write of demonising or objectifying imagery as perpetuating the 'maltreatment of possums as pests warranting extermination' (implying that killing possums is unwarranted) (29).

At times, these two 'camps' cast one another as not only wrong, but as morally wanting and dangerous. For example, Hugh Warwick, writing of conflict over the culling of hedgehogs in the Uists (hedgehogs are native to mainland Britain but not to the offshore Uist islands) describes the characterisation of those opposing the cull as 'either a bunch of bunny huggers who were too soft to appreciate objective science, or as dangerous radicals, but the reality was very different' (36). Warwick posits that this mischaracterisation contributed to mistrust and hampered cullers' later efforts to engage in productive conversations with anti-cull advocates. On the other side, language used to describe those involved in killing for conservation at times implies immorality. In Alexandra's (hereafter, Ally's) research, conservationists who shared images of dead animals were at times presumed to be 'bloodthirsty', implying an undesirable motivation for killing. Yet there were also clear indications that some sharers of death imagery take no pleasure in killing and may even find it sad or distasteful (Palmer, 'Digital Animal Deathscapes'). In the literature on political polarisation, characterisation of opponents as morally lacking is referred to as 'affective polarisation', meaning 'deep antagonism and toxic relations between political opponents' (Read 773; see also Levin et al.; Santoro and Broockman; Simas et al.).

Why is it that, despite the possibility that many people privately hold complex or nuanced views around killing for conservation, discourses may still reflect polarised, for-or-against rhetoric? We offer some initial speculative reflections on this, along with a related question: how might we encourage depolarisation around killing for conservation? These same questions are regularly asked in research on voting-related polarisation, particularly in the USA. Much of this literature seeks, as we do, to find ways of preventing or defusing polarisation. While polarisation has been acknowledged as present in conservation debates, particularly around introduced species management and killing for conservation (Crowley et al., 'Conflict in Invasive Species Management'; Redpath et al.; Warwick), we believe that more attention is needed to the mechanisms of preventing and defusing polarisation. To this end, we explore not only avenues for further research, but also literatures from other domains that could help inform our thinking—including, but by no means limited to, work on voting-related polarisation.

Of course, not all discourses around killing for conservation take a black-and-white approach. While critical animal studies scholars tend to oppose killing for conservation, animal geographers and those in related fields often take an interest in how conservation logics justify killing some animals to save others, without necessarily judging such logics as wrong (though this is sometimes implied) (Biermann and Anderson; Crowley et al., 'Killing Squirrels'; Hodgetts; Lorimer and Driessen; Srinivasan). Others criticise only certain types of killing for conservation. Van Dooren, writing about killing predators to save penguins in Sydney Harbour, objects 'not to *all* killing for conservation, but rather to killing that has been made too easy … killing that is consequently often done in awful ways, and in many cases unnecessarily' (294). Similarly, Haraway argues that one might have good reasons to kill animals, but those doing or supporting the killing must not take refuge in what she refers to as the 'solace of Sacrifice': that is, she argues it is not sufficient to rely on the idiom of sacrifice, of animals dying for a greater good, to make killing easy and obviously right—'no balance sheet of benefit and cost will suffice'. Rather, because individual animals are 'somebody', we face the 'risk of doing something wicked because it may also be good in the context of *mundane reasons*'. Haraway adds that if these mundane reasons are any good at all, they will have an 'affective and cognitive component', known as 'felt reason' (*When Species Meet* 76). In short, Haraway does not argue against ever killing animals, but rather wants the complexity and difficulty of this task to be acknowledged and explored, rather than the abstract notion of sacrifice for the greater good serving as a sufficient, ready-made rationale.

This idea forms part of a broader argument about the need to 'stay with the trouble' in human-animal relationships, meaning that when dealing with problems for other creatures that humans have created, we should avoid succumbing to either confident 'despair or to hope', but rather to act (including, potentially, to kill) while continually thinking through the problem and never being completely satisfied with our response (Haraway, *Staying with the Trouble* 4). For Haraway, 'staying with the trouble' is both risky and inherently un-polarised, working between views to be 'more tentacular, less binary' (43). It also means recognising relationality and connection. As Australian philosopher Val Plumwood has argued of the dualisms upon which much of contemporary Western life rests—such as coloniser/colonised; rational/emotional; cultural/natural; and male/female—it is the imagined hyper-separation and ranking of the qualities that creates the binaries; escaping the limits of binaries requires recognising the relations between the two, that one category could not exist without the other (Plumwood, *Feminism and the Mastery of Nature*). In Plumwood's early work, she troubles moral dilemmas and polarised views between human virtue and animality/nature by offering 'the reconstruction of relationship and identity in terms of a non-hierarchical concept of difference' (Plumwood, *Feminism and the Mastery of Nature*). Her analysis deepens in later

work after she is nearly eaten by a crocodile, leading her to question Western conceptions of moral dualisms surrounding killing and death, namely 'between those who deserve and those who are beyond ethical consideration' (Plumwood, *The Eye of the Crocodile*).

Bringing together concepts from Haraway and Plumwood and broader literature, including on voting-related depolarisation, our goal is to explore how we might encourage staying with the trouble around killing for conservation. In this sense, our goal is somewhat different to most literature on this subject, which tends to examine how invasive species are talked about or treated, or to advocate for a new approach (such as 'staying with the trouble'). We are instead interested in mechanisms: if staying with the trouble is the goal, how do we get there? By way of opening up this question, we draw on our own personal research journeys. Having realised that we each became more open to another 'side' on a polarised issue around killing for conservation during our research, we elected to undertake, in January 2024, a three-way interview with each other. In the interview, we each shared why we started our research, where we stood on killing for conservation, what changed over the course of our research, and where we are now. We draw on this auto-interview because reflexively considering how we have each personally experienced depolarisation can teach us something valuable about how this process happens. This interview might be described as a form of Critical Autoethnography (CAE), which falls between ethnography and autobiography (Ellis et al.) and involves a variety of approaches (Holman Jones), including the type of reflexive interview that we adopted (Ellis et al.). The goal of CAE is to allow ethnographers to address controversial issues, account for affective or intimate experiences often unavailable to traditional methods, and reflect on how they were changed as a consequence of their fieldwork (Ellis et al.). However, the same flexibility and reflexivity leaves CAE open to critiques, including the limited generalisability of researchers' subjective accounts (Ellis et al.). Despite this and other limitations, CAE has made it possible for us to link together our three projects, in a sensitive field, and lessons from personal experience and intellectual and political commitments (Holman Jones).

In addition to drawing from the three-way interview, we also use incidents and pseudonymised quotes from our research data. Each of us separately undertook a qualitative study of killing for conservation in NZ. Laura's doctoral research (2014-2016) involved two years of hedgehog-focused ethnographic fieldwork, first in the United Kingdom (Bristol) with hedgehog conservationists and rescuers, and then in Wellington, NZ, examining the killing of hedgehogs for conservation. Lauren's doctoral research (2022-2023) involved a year-long, in-depth ethnography in one rural Auckland primary school examining tensions around the killing of introduced predators in environmental education. Ally's postdoctoral research (2021-2023) investigated social and ethical challenges for Predator Free

2050: the plan, announced in 2016, of eradicating possums, rats, and mustelids (for example, stoats) from NZ by 2050. This involved, among other things, interviews with 59, and in-depth discussions with 17, people involved in PF2050 and its associated activities, be they critics, supporters, researchers, or professional and volunteer workers. We draw on our research data to illustrate what it was that participants said and did that helped to change our minds or reflect on polarisation, and to illustrate how our participants often held complicated views about killing for conservation, but did not always feel comfortable talking about these complexities publicly.

Each section tells one of our stories, using auto-interview and research data. In the final sections of the paper, we look across our three stories to consider what it was that opened us up to alternative viewpoints, and whether these same factors could help to depolarise conversations around killing for conservation in general. We do not claim to resolve this problem, and suggest that further detailed research on depolarisation in conservation is important. Indeed, we highlight how our positionality as researchers may have made us particularly open to hearing alternative perspectives. However, we hope that our personal accounts, and those of our research participants, might highlight areas worthy of further thinking and investigation.

Choosing to Kill Hedgehogs

We begin by recounting Laura's changing perspective on killing hedgehogs for conservation in NZ, which particularly highlights the power of acknowledging both moral and factual complexity.

Laura began her research with a certain degree of discomfort with killing introduced animals for conservation. For Laura, this discomfort went back to childhood in rural NZ, where she had 'always been a bit distressed by the anti-possum rhetoric growing up'. As such, Laura had 'no desire to study conservation in New Zealand at all'. Yet while her doctoral studies were initially planned to focus only on UK-based hedgehog conservation in Bristol she was pulled in this direction after finding hedgehogs living beneath her house in NZ (McLauchlan).

Following her UK fieldwork, Laura returned to NZ. Her first piece of NZ fieldwork—a visit to the 'Pest Fest' in Wellington—was distressing. The event was aimed at educating children about conservation, including identifying and killing 'pest' animals, as well as being a 'fun-filled day of games and activities for the entire family' (Pest Fest). And, indeed, as Laura noted in the three-way interview, 'the overall mood of the Pest Fest was one of joy of killing', and there was 'no sense of mourning of their deaths, or even that it might be something to regret a little bit'.

As discussed in more detail elsewhere (McLauchlan), the stalls affectively presented the deaths of pest animals with a mixture of scientific rationality, humour, and celebration. For example, native animals tended to be represented through glossy photographs showing off the beauty of the animals and their wild habitats, whereas pests were typically shown through taxidermy, with their teeth bared, or in photographs deliberately selected to make them appear evil (one Pest Fest presenter reflected on how hard it was to find images in which stoats looked sufficiently menacing). One table on how to most efficiently kill possums presented plastic food pots, with passers-by asked to guess the bait: an exercise that Laura found sufficiently engaging that she briefly forgot about the ultimate purpose of the activity. Particularly troubling was a stand at which children were encouraged to throw beanbags at wooden boards, each painted with a pest (a possum, rat, or stoat).

Throughout the day, Laura experienced a mixture of distress at the unmourned deaths, and fear that her loyalty to a particular pest (hedgehogs) would be found out. Eventually, Laura described leaving the Pest Fest 'sobbing', 'embarrassed because I meant to be here as an anthropologist and meant to be open to people. … And I just couldn't do it'. In this and other conservation-related activities, while Laura did have sympathy for the cause of conservationists, the celebration of the deaths of introduced predators made meaningful engagement difficult.

However, Laura was gradually able to become open to NZ conservationist participants. She recalled that 'the first little moment of change' came from one of those participants who spoke about finding killing 'really hard'. Laura recounts the participant, who was originally from England, explaining:

> she said, 'When I first arrived here, I just really struggled with the killing'. … And she was like, 'I get it now, you know… but it's still hard'.

Laura reflected that this participant was 'the first person I was able to really listen to'. Other moments of change came from others who similarly 'empathised with my pain about it' or, perhaps counterintuitively, from those who 'said, 'We don't *have* to do this [aim for the extirpation of introduced predators]'', but who instead acknowledged that this was a *choice*. One participant, himself keenly involved in trapping and part of a company manufacturing humane kill-traps, noted: 'it's a pretty massive moral/ethical call we're making. You can't just assume that that's right, you have to constantly revisit it, right?' Reflecting on her interview with this participant—an interview Laura felt had been particularly transformative for her—she noted:

> he was like, yeah, you know, we don't have to do it. New Zealand would actually be fine if we didn't do all this trapping work. You would probably lose, almost certainly would lose some species. But there wouldn't be ecosystem collapse. … And him saying this is a *choice* that I'm making, I'm making a choice to kill these species because I really think these [other] species are amazing, and because I'm making a choice, I want to make sure I'm doing it as humanely as possible, because I don't have to do this. And there was something about him saying it was a choice and not the only option, whereas a lot of other people's modes of argumentation had been like, we *have* to do this… It wasn't until it became something that could be chosen rather than that had to happen that I got into it.

For Laura, it had been a sense of not having zero predators be the only option that had both made space for her views and, in ways that surprised her, actually opened her much more to the cause of widespread kill-trapping. Today, Laura reflected on being 'much more pro-killing than when I started off, so much more. I'm really grateful to a lot of the people who are doing the work of killing'. However, for Laura that still doesn't mean agreeing with the choice to kill in every instance.

Some initial hints from Laura's account, on which we will expand later, are thus that acknowledgement of moral and factual complexity could be valuable for depolarising views around killing for conservation. As encouraged by van Dooren and Haraway, some of Laura's research participants found killing to be far from easy, and their acknowledgement of their 'staying with the trouble' was itself persuasive. So too was transparency around the idea of killing as a choice, rather than an unequivocal necessity or patriotic duty, resonating with literature on the (sometimes) persuasive power of transparency around uncertainty or complexity (Gustafson and Rice; Ratcliff, Wicke, et al.).

Teaching Children to Respect and Kill Introduced Mammals

We now turn to Lauren's account, which resembles Laura's in that Lauren gradually came to be more accepting of—though similarly not comfortable with—some instances of killing for conservation. In Lauren's case, this shift came about while researching what and how children were taught about killing rats, possums, and other introduced mammals in a NZ primary school. Particularly important for shifting Lauren's perspective were empathy and trust built up with research participants as well as witnessing the sensitivity with which the subject was taught, and its generally positive implications for children.

Lauren, like Laura, 'did not mean to come into this' area of research; rather, as an early childhood teacher and education researcher, she had anticipated doing a 'fluffy, happy' PhD project on interspecies communication in child-dog relationships. However, some initial reading indicated that there was already plenty on this subject, and also a gap on child-possum relationships: 'Children were getting taught in schools about how to kill—directly killing, or just about the whole process of it—and there was no research done on it at that point'. The only literature on the subject Lauren could find was from 'a few academics who were usually activists saying that conservationists were horrible people'. In Lauren's view, much of this criticism was poorly considered. For example, she noticed a tendency to link together research about the connections between animal abuse and human violence (Gullone; Flynn; Williams et al.) with conservation education in schools, implying that teachers may foster future abuse. However, while research indicates a correlation between animal abuse and interpersonal and family violence, there is little to suggest that violence towards animals precedes or causes diminished empathy and violence directed at people (Gullone; Flynn; Palmer and Birdsall; Willing). Of greater concern, according to Espiner et al. based on a review of empathy development literature, is the risk that specific animals will come to be viewed with less empathy from 'cultural distortions', if teaching involves demonisation or a lack of care for 'pest' animals. Yet whether teaching involved such demonisation was unclear, as Lauren noted a lack of both children's voices representing their own experiences and accounts of what teachers were actually doing and saying in classrooms (Willing). This was particularly personally 'uncomfortable' for Lauren, because 'as an animal activist and a vegan that I was in the beginning, I didn't want to be lumped in with those people'.

Once in the field, 'things got really messy' in terms of Lauren's perspective. One important factor was the bonds of trust forged in the field: 'I formed very strong relationships with these teachers, with the community in general and with the students, with the children'. Also shaping Lauren's view was the quality of the teaching itself:

> they didn't get to the trapping until term four, so they had three whole terms of an incredible programme where they planted trees, they harvested seeds from their growing settlings and then grew them into saplings, and they created an ecosystem. First, they learned about which trees feed which birds, and they tried to draw those birds. … Before they got to the trapping they'd learned about the different animals that were called pests, where they came from, and kind of debunked that word 'pest' to come to the arrival that these were just animals in the wrong environment. … So I ended up finding that the programme was amazing. The children learned a lot and I feel quite

> differently about killing and about conservation than I did in the beginning.

The teachers in Lauren's study were careful to emphasise respect and empathy even for introduced animals, which, in a separate study, Ally found is increasingly common among NZ environmental educators when teaching this subject (Palmer and Birdsall). For example, Miss B., a teacher at Lauren's field site, spoke of her messaging as follows:

> Once you get the 'it's an animal in the wrong environment' then you know it's an animal that could be your pet rabbit, it could be your pet hamster, because it's all the same thing. Once you got that then the ethic and values and the morals are there to work with. And I guess knowing the kids and having conversations with the kids, and trying to get it put into context that then they could understand like the students wearing clothes to school [this was the example she used in class]. You know, you didn't choose to wear clothes to school, you just did because 'that's what we do', and the same for that particular rodent, he didn't choose to eat the eggs, it's just what they've learned to do. So, it's not necessarily his [the rat's] fault, it's evolution. It's kind of just happened. We've adapted, we've adapted to wear clothes, it's adapted to eat the eggs because it needs something to survive. So, I think putting it into a context that they can understand and the fact that it's not a thing, it's not something we need to torture because it's an animal that has a family. When I said that to one of the girls one day, they said, oh, that's somebody's auntie. You know, putting it into context that they can actually understand too, I think is key.

The vast majority of students, Lauren concluded, absorbed this message. However, as classrooms are made up of diverse learners from many different backgrounds, she found that teachers struggled against outside influences affecting some individuals (Espiner et al.; Conner; Harbott). This suggests that teaching might under some circumstances help to depolarise, but this depends on both the teacher and the student. One student—out of nowhere, and towards the end of Lauren's year-long study—told Lauren and the teacher in class one day that he wanted to torture introduced animals. Lauren reflected that this 'had nothing to do with what they were learning at school, and actually their teachers were quite disturbed to hear that'.

Resonating with Laura's realisation that many people are uncomfortable with killing, Lauren was struck by how even teachers, community workers, and parents supportive of involving children in trapping were uncomfortable with certain elements of killing for conservation. Joeys—baby possums that might still be alive

in the pouch of a female possum killed in a trap—were one particular source of discomfort. Lauren noted that the teachers had pets and often spoke about loving animals, and 'were mortified when one of the possums had a joey in the pouch and couldn't themselves deal with it, and would have to get someone else to come and help them'. Bill, a community conservationist who assists with teaching the school programme, reflected that he avoids allowing the children to see the joeys, or the joeys being humanely killed (via a swift blow to the head). He also appeared visibly uncomfortable when Lauren raised this subject in the interview, further speaking to its particular difficulty. So too when Lauren asked a teacher during an interview about an incident when children had to deal with a rat in a trap that was 'half decomposed already', due to the trap not being checked for a few days and the weather being hot: when Lauren raised this subject, the teacher 'got really uncomfortable and didn't want to talk about it'.

At other times, participants were willing to talk about their complex views or discomfort with elements of killing, even if they did not always appear convinced by their own arguments. For example, Michelle, who encouraged her child to participate in trapping at school, spoke of being personally uncomfortable with killing, a view which she reflected is somewhat hypocritical given her willingness to eat meat:

> So, I'm an animal lover and I love all of nature and I look at stoats and their cute little faces and even rats. Everything. I'm a real animal lover. So, I really struggle with killing anything. Obviously the cat kills the rabbits, which are a pest, which over the years of living rural I've got a bit more used to. But I still struggle with it, and on the odd time I've caught something I've either released it or generally it's died of its own accord of me trying to rescue it or something. It's a value of life thing, but I'm very, very aware and supportive of other people, um, eradicating them, I guess is that the word? … I think I am a bit of a hypocrite I suppose, because I eat meat and we kill animals that way. … I guess I feel sorry for them [rats, stoats, possums] all being picked on and as you said it's humans' doing. You know, they wouldn't be here if we hadn't introduced them to our forests. And then now we're having to kill them. So yeah, I feel sorry for them, but I am very realistic about the damage that they are doing, having seen and experienced it with my own stock and animals and birds.

For Michelle, killing is probably necessary, but also extremely difficult, and not something that she personally feels comfortable doing—despite being happy for her child to trap.

Lauren and Laura shared an experience of becoming more accepting of killing for conservation over the course of their work, even if they remain uncomfortable and long for more nuanced and place-specific decision-making processes around killing. Lauren reflected that she now thinks of the situation as 'very complex, and that's what I had set out to find, so I got what I wanted, but it really messed me up in the head'. Her general view of the matter now is that it is 'not a black and white situation… it's extremely complex, and it is very uncomfortable'. In both cases, this shift was in part informed by participants' acknowledgement that killing is complex—or, in Lauren's case, their clear discomfort with elements of killing even if they did not openly speak about this—and by their efforts as researchers to remain open to other views. Also important in Lauren's example were witnessing first-hand sensitive and nuanced teaching (the facts of how teaching was delivered and received spoke for themselves), and bonds of trust formed with teachers and other participants.

Depolarising the *How* of Killing

We now turn to a slightly different case, which relates to depolarisation around both the *how* of killing for conservation as well as the question of *whether* to do it (see Crowley et al., 'Conflict in Invasive Species Management'). This example also differs to the others in that Ally was always comfortable in theory with killing animals for conservation—though in practice she had always found it unpleasant, recalling being somewhat disturbed by the sounds of possums being trapped on her parents' lifestyle block as a child. However, we also see connections between Ally's story and those of Laura and Lauren, particularly how a research ethic of openness, acknowledgement of factual complexity, and empathy for research participants can contribute to perspective-shifting.

Despite starting from a different perspective on killing for conservation, Ally shared with Laura and Lauren a commitment to understanding alternative perspectives. Ally had spent several years studying orangutan conservationists during her PhD (Palmer, *Ethical Debates in Orangutan Conservation*), and often found herself in a position of defending conservationists against their critics within academia. At the same time, Ally emphasised a reluctance to 'be the kind of academic who was really pushing for one side or another' on matters of debate, instead seeking to 'put my feelings aside for a minute to try to really understand people'. Ally was therefore happy to take up a research project on Predator Free 2050, but was eager to ensure that she would not by implication become an advocate for any particular side, despite being funded by Predator Free 2050 Limited, one of the key organisations working towards the PF2050 goal.

During Ally's fieldwork, she became aware that depolarisation around the *whether* as well as the *how* of killing was important, particularly to six interviewees

(notably, all animal welfare researchers, animal advocates, or critics of PF2050) who complained about demonising narratives about introduced species. Nearly all of these participants were supportive of killing for conservation; what they wanted was depolarisation in public discourses. For example, animal welfare researcher Jane complained:

> our local wildlife rehabilitation centre ... has signage up with the classic post office 'wanted' poster of a stoat and with that language: 'This evil animal is destroying this and must be killed at any cost'. And I went to them and said ... We need to actually take a more compassionate approach to these animals, while acknowledging that they have to be killed. And they wouldn't take it down.

Elaborating on what she would like to see happen, Jane reflected:

> I think it's part of the national identity that killing things for conservation is good. And as I said, I'm not opposed to that. I don't have any particular problem with that as a message. But I do think that we need to be honest about the harm that we're doing, the suffering that we're causing in the name of conservation, and not try and offset it by saying, they'll kill the birds, and the birds will suffer. … [T]here is nuance to it, and we have to hold that discomfort and carry it with us, and acknowledge it, and, obviously, that's not something that people want to do, and it's not a great way to get people on board with a big campaign to kill things.

Animal welfare advocate Olivia similarly sought depolarisation of public discourse, and reflected on the personal implications of polarisation. Olivia explained that she is not firmly opposed to killing for conservation. On the contrary, while some people 'expect that you're [that is, I'm] totally against it', she doesn't 'necessarily think it's a bad thing to have places for native wildlife to be thriving' and has found visiting predator-free offshore islands 'magical'. Yet, on a personal level, Olivia explained that:

> I don't trap. I can't bring myself to do it. But I actively manage weeds on my property to help native plants thrive. Because to me, that's my part. … And I have to talk to my neighbours on this stuff. It comes up. And there's trapping groups in my neighbourhood. … I'm really guarded about things. Because I don't want to put off my neighbours. Like here we are, pulling weeds together. So it's a strange one. … That's my little space where I don't have to think about animals. I don't want to think about that stuff.

Like Michelle from Lauren's study, Olivia did not personally want to trap, but also did not want to stop others from doing so. However, for Olivia, this nuanced position was sometimes seen as unacceptable in a polarised environment. Speaking about a public event on invasive species in NZ, Olivia recounted:

> she [the event speaker] was like, okay, well, let me see a show of hands. Who in this audience is backyard trapping? ... And most people raised their hand but there were a number of people who didn't. ... And then she's like, okay, for those of you who didn't raise their hand, why not? ... I'm like, ooh, I'm feeling the pressure. ... this is the shame of it, it's been talked about in ways that make people worried. That if they don't buy into this… It's like the 'be a good kiwi' kind of feeling. Like this is what good kiwis do. Like, we care, therefore we do this. ... I was just sanctioned, in this community, for not participating in these activities.

While Ally's fieldwork was what made her conscious of the need to depolarise conversations on *whether* to kill, she was well aware beforehand of polarisation around *how* to kill—and it was on this latter subject that she experienced a personal shift. Toxins, particularly 1080 (sodium fluoroacetate) have been used for invasive animal management for decades in NZ. NZ is the world's largest user of 1080, one reason being the near-absence of native land mammals, which are particularly susceptible to the toxin (Warburton et al.). In Western Australia, the use of 1080 to target introduced foxes since the 1980s has been similarly justified in part by many native mammals' resistance to the toxin, which naturally occurs in some of the region's native plants (Gastrolobium genus). The toxin is also, however, used in other Australian locations to target foxes, feral cats, wild dogs, pigs, and rabbits (Invasive Animals Council). Yet the toxin, at least in NZ, is controversial, particularly when distributed aerially via helicopters (Warburton et al.; Green and Rohan; Nguyen et al.; Kannemeyer). Common worries are that non-target animals will be killed, waterways contaminated, and predators killed inhumanely, with mistrust of government often seen to lurk behind these proximate concerns. In response, conservationists argue that such claims are based on mis- or disinformation, including reports of historical poor practices that have since been discontinued (Green and Rohan; Kannemeyer; Nguyen et al.). This discussion is often represented in polarised 'us' and 'them' terms, with both opponents and advocates of 1080 accusing the other side of science denial, and of making their arguments in bad faith to support a political agenda (Kerr et al.). Irrespective of the merits of any of these accusations, the 1080 climate in NZ is highly polarised.

Describing her position before the research, Ally reflected, 'I just read the headline news stories being like, "some people think it [1080] kills native birds, but that's wrong". … Quite, sort of, simple; I hadn't really thought about it much', but she

generally took the side of the conservationists. Two things increased her sympathy for those opposed to toxins. One was learning that matter of toxins was 'a lot more complicated than what I'd thought'. While conservationists Ally interviewed were almost always in favour of 1080, despite its genuine risks (for example, specifically to the native alpine parrot kea: Department of Conservation), they often had more concerns about the anticoagulant toxin brodifacoum. Brodifacoum, or 'brodie', was described by 14 participants as worse than 1080 in the dimensions of common concern (that is, less humane, a greater risk of killing non-targets and contaminating the environment), yet also an unfortunate necessity for eradications due to its unique effectiveness. For both of these reasons, participants commonly expressed the view that access to brodifacoum should require a licence. However, they also worried that demanding a licence would raise awareness about the toxin's side-effects, thereby making it more controversial. As summarised by eradication specialist Brendon:

> Joe Bloggs, the farmers, anybody, can just buy it off the shelf and it enters the system without even any sort of controls on it at all. That really needs to be sorted out. I'm not yet sure how you go about it because as soon as you put in more controls on brodifacoum at the public level, then there'll be more interest in why those controls have come on.

Participants were therefore worried that drawing attention to brodifacoum would mean 'we would lose a lot of social licence' (Kim, national-level PF2050). As in Lauren's case, Ally found that learning in greater detail about the facts of the situation made the picture more complex, and was to some degree perspective-changing.

The second factor that gave Ally more sympathy for opponents of toxins was empathy on a personal level for their sense of alienation, brought about due to her nuanced views on another highly polarised subject dominating life at the time of her data collection. Ally described feeling 'uncomfortable' with COVID-19 vaccine mandates in force in NZ at the time, particularly the widespread 'demonisation of humans' who were opposed to vaccines. Of particular concern was the risk that mandates and demonisation of 'anti-vaxxers' would damage science-society relationships and radicalise opponents of vaccines. Despite being willingly vaccinated herself, Ally found that expressing her objection to mandates was difficult, given a tendency for anti-vaccine and anti-mandate views to be conflated in public discourse. This resulted in a feeling of alienation and being at odds with mainstream opinion, even though she was vaccinated and thus not personally impacted by mandates. This sense of disconnection was exacerbated by having moved back to NZ from the UK, where similar policies had not been adopted, around the time of commencing interviews:

> I was feeling quite alienated in general, for other reasons, at the time that I was doing with the interviews. And so somehow, I think that made me a bit more open… I spoke with a couple of anti-1080 people and I really felt for them. It's not that I,—some of the stuff they said I was like, no that can't be right, but just at a personal level… They just feel so pushed aside from mainstream society and just completely out on their own.

Following fieldwork, Ally's support for the careful use of 1080 remains, but she now wishes that there were greater transparency and discussion around its risks as well as greater efforts made to avoid alienating its opponents. So too of brodifacoum, about which she has more concerns.

Depolarisation Strategies

We now reflect on what hints can be gleaned from our experiences, and those of our participants, about how we might encourage 'staying with the trouble' in ways that invite dialogue across lines of difference around killing for conservation. Bringing our research journeys into conversation with the broader literature, we offer suggestions for where further investigation could be productive, bearing in mind the limitations of critical autoethnography and the risk of generalising from our subjective research experiences (Ellis et al.).

Acknowledgement of Moral Dilemmas

Persuasive for Laura was acknowledgement that 'Laura, you're not crazy': killing is indeed hard, and many people share this feeling. This acknowledgement helped make Laura more open to the views of proponents of killing for conservation. Research participants also sometimes made the case for discussing and acknowledging the difficulty of killing, for example the teachers at Lauren's field site. Acknowledging the sadness of killing could be understood as recognising a moral dilemma. These involve conflicts between moral requirements, such that the actor seems doomed to 'moral failure' (McConnell). Generally, the key moral dilemma to which participants referred was the trade-off at the heart of killing for conservation: that the best interests of the ecosystem or population might be best served by compromising the lives of individual animals (Leader-Williams et al.; Palmer, *Ethical Debates in Orangutan Conservation*; McLauchlan).

However, there could be risks to encouraging acknowledgement of this moral dilemma. Jane, an animal welfare researcher interviewed by Ally, wanted to see more public discussion of moral dilemmas and trade-offs in conservation, but was also sceptical that such messaging would 'get people on board with a big campaign

to kill things'. She may well be right: there is a risk that talking openly about the harms of killing sentient animals will simply make people feel worse about work that is already challenging. People whose work involves killing animals are already prone to emotional stress, for example shelter workers (Coulter), vets (Morris; Sanders), and animal laboratory workers (Roe and Greenhough). Indeed, Crowley et al.'s study of conservationists who kill grey squirrels in the UK indicated that most do so reluctantly. Discussing moral dilemmas could simply encourage emotional stress among trappers, potentially discouraging them from doing it at all.

Furthermore, there were hints from our research that people find conversations about the challenges of killing difficult, even taboo, with Lauren encountering situations when participants were reluctant to talk about the more distasteful aspects of killing such as finding joeys in pouches or handling decomposing animals. This resonates with the observation that animal death is often hidden from public view and discussed using euphemisms (for example, dispatch in the case of killing squirrels for conservation: Crowley et al., 'Killing Squirrels'), given that its revelation is presumed to inspire discomfort (Mazhary). Bringing these difficult conversations into the public realm could therefore make people uncomfortable or unwilling to engage. We might also speculate that appearing to pander to those concerned about killing might annoy some with a more black-and-white view of the matter, as implied by some of Ally's participants who expressed unwillingness to tailor media communications to people they saw as being overly 'precious' (Palmer, 'Digital Animal Deathscapes'). In the distinct but potentially analogous situation of voting, experiments have suggested that voters could penalise candidates for appearing to pander to a group that they personally do not belong to (Hersh and Schaffner). Further research into whether annoyance at perceived pandering around killing for conservation could be valuable.

Still, for Laura, being reassured that she was not alone in finding killing difficult was persuasive rather than off-putting. Evidence suggests that many people who would consider trapping in their backyards avoid this out of a dislike of killing or handling carcasses, like many of our research participants (Kirk and Kaine; Macaskill et al.). Killing is hard, for many people, and reassurance that this feeling is shared could potentially do good. This appears to us one area where further research would be valuable.

Transparency Around Factual Complexity

As we suggested above, transparency around *moral* dilemmas and nuance could be persuasive in some circumstances. So too regarding factual nuance or complexity, that is, details about how reality is more complex, or different to, simplistic depictions originating from one 'side' of a polarised debate.

Laura was moved by those who spoke about killing for conservation as optional: something that, if not done, will certainly lead to loss, but not to ecological collapse as is sometimes implied in conservation rhetoric. Toning down of hyperbolic language, and transparent acknowledgement of the outcomes of not killing predators, was therefore persuasive. Relatedly, in Lauren's case, learning the details of what was actually being taught to children was significant, since it became clear that at her field site, controversial material was being delivered compassionately and carefully, not in a careless way as sometimes imagined by critics. Indeed, contrary to the concern that teaching about killing for conservation will diminish empathy (see discussions in Palmer and Birdsall; Willing), Lauren concluded that the programme provided a crucial safe space for children with concerning inclinations to share their thoughts, thereby allowing for the possibility of being guided towards greater empathy. Ally similarly came to realise, through honest admissions from conservationists, that there are sometimes good reasons to be concerned about the use of toxins, such that even though they may still be the least bad option, they are certainly not an unequivocal good, so critics sometimes have a point.

Our perspectives shifted when there was either transparent acknowledgement of factual complexity by others, or we witnessed first-hand how reality differed to what we or others had imagined. The former case, where complexity was acknowledged by others, connects to the substantial literature on transparency in science and governance. While not trumping all other concerns, transparency can be important for increasing trust (McLeod and Hobson-West)—conversely, its absence can diminish trust, including around lethal wildlife management (Hampton and Teh-White). Mistrust can, in turn, fuel polarisation, as seen in the example of 1080. Transparency around uncertainties or complexities in particular can, in certain situations, build trust, though there are numerous individual and contextual factors at play (Gustafson and Rice; Ratcliff, Wicke, et al.). For example, Ratcliff, Wicke, et al. observe that while in most studies of health and scientific communication, additional information about uncertainties increased public trust in science, the opposite appears true of most COVID-19 studies—which the authors attribute to audiences having already encountered messages of certainty in their daily lives. Individually, preferences for the level of detail on scientific uncertainties and complexities might be shaped by factors like a person's degree of scientific literacy, with the better-informed tending to prefer more detail about uncertainties (Ratcliff, Harvill, et al.). It can therefore be difficult to predict whether greater transparency around factual nuance and uncertainty will increase or decrease trust and hence polarisation.

For this and other reasons, transparency can be scary. A common fear—for example, in animal research (Holmberg and Ideland; McLeod and Hobson-

West)—is that admitting openly to problems will give fuel to critics and diminish trust. This fear is common among scientists and journalists (Maier et al.), and is not unfounded; see the above discussion. It is thus not uncommon for information to be 'stripped out of its intrinsic intricacies and dilemmas' in policy communications, possibly 'in order to prevent eliciting anxious and "irrational" public reactions' (Markon et al. 315). We saw this pattern come up in Ally's interviewees' worries about licensing or talking openly about the side-effects of brodifacoum, which was thought likely to fuel opposition to a toxin that is problematic, but also the only option for eradication. Communicating nuance and complexity was, in this case, seen as potentially fuelling polarisation and was thus avoided.

Turning to the literature on depolarisation, a number of studies have found that 'misperception correction', for example about the extent to which opponents support political violence, can be a useful tool for decreasing affective polarisation (Voelkel et al.). However, this approach may become less useful in the presence of competing, contradictory information (Druckman), and it could be important where information comes from, with those in more extreme 'echo chambers' likely to only trust certain sources (C. Thi Nguyen). Correcting misperceptions also may not help with broader, related issues around polarisation such as support for undemocratic candidates or partisan violence (Voelkel et al.). More broadly, while providing facts may help with defusing polarisation, it may be unlikely to change positions on matters of morality, where it is values rather than facts that are the primary source of disagreement (Frank). Taken together, this and the literature on transparency suggests that there are likely many personal and contextual factors influencing the extent to which transparency around factual complexity is persuasive, again suggesting a need for further research into the case of killing for conservation.

Openness and Being Ethnographic

As we have seen, our perspectives were shifted in part by detail on factual complexity and nuance; however, the literature suggests that this is by no means guaranteed and depends on the individual and context. Individually, an important factor could be our particular openness to others' perspectives. In psychological studies, the personality trait of 'openness to experience'—a preference for seeking out novelty and variety versus familiarity and routine—is typically associated with greater tolerance of people with different worldviews (though there may also be other important factors at play, such as the prevailing norms of one's 'in-group' around tolerance: Brandt et al.). In our cases, openness was also a professional commitment. Laura wanted (though felt she had failed) to be a good anthropologist by being 'open to people'. Lauren, despite identifying as an animal activist, sought to distance herself from uncritical and overly simplistic

approaches, instead wanting to genuinely find out what was occurring in a poorly documented field. Ally had consciously adopted an ethic of 'put[ting her] feelings aside' in order to understand others, to the point of adopting this as a personal ethic in research practice.

We were all therefore deliberately seeking to understand our research participants on their own terms. This follows the traditional purpose of ethnographic research, which, as Madden describes, aims to become 'close, but not too close' to research participants: to understand their perspectives (the 'emic' view) while at the same time being able to step away and critically reflect on their practices (the 'etic' view). While our research was not always classic ethnography in the sense of involving immersion at a field site (for example, Ally's work primarily involved one-off interviews), we all approached our work with something of an ethnographic mindset. As Madden proposes, 'being ethnographic' is not simply a set of methods but also a 'state of being', involving 'a curious and questioning perspective that one inhabits akin to a method actor inhabiting a role' (71).

Of course, not all ethnography is conducted with curiosity and a lack of judgement. Langlitz laments that anthropology has, particularly since the 1990s, often become moralising, with this moralising typically imbued with a progressive agenda: a shift which means that anthropology more readily contributes to polarisation rather than defuses it. Langlitz instead understands anthropology's primary task as 'to exercise a sense of possibility, to make available alternative perspectives, and to examine how they inform the conduct of life' (990), and encourages reinstatement of this ethic. He suggests this not only as a way of making anthropology more useful, but also for its potential for self-improvement: of the pioneers of anthropology, Langlitz observes that '[b]racketing their moral convictions was not just an epistemological practice to understand the so-called native's point of view unencumbered by ethnocentric bias, it was also a work on the self that aimed not at ethical fortification but at transformation' (993).

One might argue that Langlitz's proposal of encouraging openness, and the bracketing of moral convictions in certain contexts, has limited value for depolarising in general given that it relates specifically to anthropological research practice. However, if applied more broadly to universities and schools, perhaps it would have a wider impact and help to promote openness as a character trait. This proposal resonates with those made by advocates of civic education aimed at encouraging open-mindedness, for example through the sensitive discussion of difficult topics in classrooms (Fitzgerald et al.; McAvoy and Hess; Pace).

Empathy and Sympathy

Implicit in the discussion above is the concept of empathy: broadly, the perception and understanding of another's emotions (Cuff et al.), including, potentially, other species (Angantyr et al.). This is often distinguished from sympathy, or feelings of concern for another. Hein and Singer summarise the distinction as, respectively, 'feeling *as* and feeling *for* the other' (57). We are not here particularly concerned with the difference between these feelings; what is important is whether the plight of another is identified and responded to in an empathetic or sympathetic way.

Participants talked about empathy and sympathy for both the native species conservation aims to protect, and for introduced species targeted for killing. While feeling for only one of these two could lead to polarisation, there were hints that having some concern for both could lead to a middling view. For example, Michelle from Lauren's research was well aware of the 'damage' done by introduced animals, but simultaneously described 'feeling sorry' for them (that is, feeling sympathy). The teachers at Lauren's field site went out of their way to ensure that children felt empathy or sympathy for both sets of animals, first introducing students to the native birds of the forest and then familiarising them with each introduced animal, including material on where each animal came from, how they got to NZ, and how they are valued in their home countries (Ovid and Phaka). Miss B. even talked about strategically anthropomorphising and individualising introduced predators to ensure their relatability (Lorimer; Palmer, *Ethical Debates in Orangutan Conservation*), for example by situating animals within wider family networks.

Empathy or sympathy for humans can also be important, even though the issue (killing for conservation) concerns other animals. Laura was particularly moved by those who indicated that they understood and shared some her feelings of discomfort with killing; receiving empathy from others was important for making her more open to other views. For Lauren, building empathy with long-term ethnographic participants was significant and even perspective-changing. Ally felt better able to understand participants who may have felt alienated or isolated through an analogous situation that she was personally experiencing.

Many scholars and commentators have proposed that the sharing of others' perspectives or emotions could help to reduce polarisation (see summaries in Read; Simas et al.). However, there is also reason to be cautious about empathy's promise of reducing polarisation, since evidence suggests that empathy might simply be applied to those within one's 'in-group' rather than extended to those seen as other. Thus, in experiments, those who score higher on measures of empathy may actually display more affective polarisation (that is, animosity towards political opponents) (Simas et al.), and oxytocin, viewed by some as the

'empathy hormone', is associated with greater in-group cooperation as well as increased out-group competition (De Dreu et al.; De Dreu). There is a hint here that empathy may need to be combined with openness to learning about others' experiences and to expand notions of in-group membership through encounters marked by reciprocity (Fourie et al.). Context could also be important here. Entiativity, or the extent to which others are viewed as a distinct 'group', can reduce empathy towards such opposing 'teams'—even encouraging taking pleasure in the pain of others (Cikara et al.). Psychologists have also proposed that 'elevated power may reduce the propensity to respond emotionally to other people's suffering' (van Kleef et al. 131). In Ally's case, taking the perspective of anti-1080 advocates make have been easier in a context of feeling powerless about a different, analogous situation.

Can Discomfort Be Held?

We all felt that during the course of our research we became better able to understand another 'side' of introduced animal management, even if we continued to disagree. In a sense, we were better able to 'stay with the trouble' after completing our research, or to 'hold discomfort', to use a phrase from Jane (one of Ally's research participants). Particularly influential in changing our understandings were the open acknowledgement of moral dilemmas; revelation of factual complexity through first-hand experience or transparent communications; our determination to 'be ethnographic' and be open to others' perspectives; and feelings of empathy and sympathy towards research participants. Some of these ideas were echoed by our research participants, particularly the request for more open public discussion about moral dilemmas.

However, our review of the literature suggests that each of these factors that helped to shift our perspectives personally might not have broad applicability, or they could come with side-effects. Given the likelihood of emotional stress among those who kill animals (Coulter; Morris; Sanders; Roe and Greenhough; Crowley et al., 'Killing Squirrels'), we worry that talking openly about moral dilemmas could make people doing the work of killing feel bad, or even diminish support for activities that, while troubling in some ways, may also be on balance worthwhile. We personally found correcting misperceptions and providing factual nuance perspective-changing, but the broader literature suggests that this does not always work, and that contextual and individual factors help to shape the impact of communicating facts and scientific complexity. Similarly, we were all committed to being open to others' perspectives, but this was partly a professional ethic of 'being ethnographic' that could be challenging to apply outside of research contexts. Empathy and sympathy could be important, but the literature hints that this too is contextual, with empathy at times applied selectively to one's in-group.

This context-dependency suggests a need to better understand polarisation and depolarisation around killing for conservation in particular.

Another area that we suggest needs further probing is the extent to which polarised discourses around killing for conservation reflect what people really think. Previous studies have suggested that conservationists' views on complex moral problems are typically far more nuanced than popular discourses, and even the official statements released by their organisations (Palmer, *Ethical Debates in Orangutan Conservation*; Kiik). Similarly, in our research we found a surprisingly large number of participants who one might expect to be wholeheartedly committed to killing for conservation or the use of toxins express nuances, caveats, and doubts. We have offered some speculations as to why this could be the case, from fear of backlash in the case of brodifacoum to discomfort with discussing the unpleasant, distasteful, or sad dimensions of killing (for example, killing possum joeys).

Our closing reflections in our three-way interview dwelled on whether it might be possible to overcome this discomfort and talk openly about complexities. For example, Lauren asked, 'Why is it not okay to talk about this? … [C]an we not still talk about it and be uncomfortable?' Similarly, Laura concluded, 'I just wish that more of the uncertainty could be mentioned in that it could still be okay to act while being uncertain'. Our lingering uncertainties at the end of our three-way conversation, and at the end of this article, indicate that we are still not sure whether it will ever become commonplace to speak openly about moral dilemmas and factual complexity about killing for conservation in public. However, we are a little more certain that we would like this to happen if possible. Yes, it might put some people off; as Haraway acknowledges, staying with the trouble is inherently risky. It is, however, also more honest, and would probably bring around a few people even if some are turned away.

We therefore propose that, in addition to conducting further research into how polarisation around killing conservation could be defused or prevented, we begin experimenting with having open conversations about this difficult topic. There are already some efforts to do this. For example, the sensitivity of teaching described by Lauren, and elsewhere by Ally (Palmer and Birdsall), suggests that educators are already thinking about conveying nuanced messages and making space for uncertainty and dissent. Perhaps these lessons from education could be applied more broadly to public communications around killing for conservation. We also note that there are signs of black-and-white rhetoric being toned down. For example, the logo of the Predator Free Trust—a non-governmental organisation focusing on engaging communities in predator control—has changed from a cartoon of a kiwi bird standing atop a bright red cartoon rat, with crosses on its eyes to indicate death, to simply a cartoon kiwi, suggesting a growing awareness

about the risks of demonising language and imagery. We hope to see not only further changes to demonising language, but also a willingness to take the kinds of challenging conversations that we had with research participants into the public realm. We hope that this article will help to instigate this dialogue.

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