The politics of animal extinction and conservation: Interests, framing, and policy

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Abstract

Why do conservation policies fail to prevent species extinctions and die-offs in contravention of stated intentions and goals? Bringing together a range of literature, including political ecology, political theory, conservation science, communication theory, environmental communication, with original data, this article explores this question, then addresses these failures within Aotearoa New Zealand's context. Using the New Zealand case, it offers a systems-level view of these failures, focusing on the influences and limitations that arise from the political-economic structures, fractured governance, interest group influence, and non-governmental organizations (NGOs) in representative democracies. Secondly, in these settings, we argue that communication and framing by the interested parties—politicians, government officials, interest groups and NGOs—buttress this system, partly by normalizing it, obscuring scientific realities, shifting focus away from deeper issues, and thus limiting the possibility of substantive solutions in what might be called a colonization of consciousness. Together, this economic-political-communication complex has failed to prevent—and in some ways aided—mass die-offs of native animal species. The article then suggests exploring alternative models, such as deliberative democracy, to this seemingly intractable problem, to strengthen the influence of scientific expertise, better inform decision-makers, advance public understandings of science, and improve democracy by engaging members of the public in decision-making processes. While this study focuses on New Zealand, the issues related to political ecology, the political-economic systems, and the framing of issues, apply to many democratic countries.

Keywords: animals, animal species, biodiversity; conservation, environment, extinction, framing, New Zealand, deliberative democracy

Résumé

Pourquoi les politiques de conservation ne parviennent-elles pas à prévenir les extinctions et les disparitions d'espèces, contrairement aux intentions et aux objectifs déclarés? En rassemblant un éventail de littérature, y compris l'écologie politique, la théorie politique, la science de la conservation, la théorie de la communication, la communication environnementale, et des données originales, cet article explore cette question, puis aborde ces échecs dans le contexte d'Aotearoa Nouvelle-Zélande. En utilisant le cas de la Nouvelle-Zélande, il offre une vue systémique de ces échecs, en se concentrant sur les influences et les limitations qui découlent des structures politico-économiques, de la gouvernance fracturée, de l'influence des groupes d'intérêt et des organisations non gouvernementales (ONG) dans les démocraties représentatives. Deuxièmement, dans ces contextes, nous soutenons que la communication et l'encadrement par les parties intéressées—politiciens, responsables gouvernementaux, groupes d'intérêt et ONGs—affaiblissent ce système, en partie en le normalisant, en occultant les réalités scientifiques, en détournant l'attention des problèmes plus profonds et en limitant ainsi la possibilité de solutions substantielles dans ce que l'on pourrait appeler une colonisation de la conscience. L'ensemble de ce complexe économico-politico-communicationnel n'a pas permis d'empêcher—et, à certains égards, a favorisé—les disparitions massives

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d'espèces animales indigènes. L'article suggère ensuite d'explorer des modèles alternatifs, tels que la démocratie délibérative, pour résoudre ce problème apparemment insoluble, afin de renforcer l'influence de l'expertise scientifique, de mieux informer les décideurs, de faire progresser la compréhension de la science par le public et d'améliorer la démocratie en faisant participer les membres du public aux processus décisionnels. Bien que cette étude se concentre sur la Nouvelle-Zélande, les questions liées à l'écologie politique, aux systèmes politico-économiques et à la formulation des problèmes s'appliquent à de nombreux pays démocratiques.

Mots clés: animaux, espèces animals, biodiversité, conservation, environnement, extinction, encadrage, Nouvelle-Zélande, démocratie délibérative

Resumen

¿Por qué las políticas de conservación no evitan la extinción y mortandad de especies, contraviniendo los objetivos e intenciones declarados? Este artículo, que reúne diversos literaturas sobre ecología política, teoría política, ciencias de la conservación, teoría de la comunicación, comunicación ambiental y datos originales, explora esta cuestión y aborda estos fracasos en el contexto de Aotearoa (Nueva Zelanda). Utilizando el caso neozelandés, el artículo ofrece una visión de estos fracasos a nivel de sistemas, centrándose en las influencias y limitaciones que surgen de las estructuras político-económicas, la fractura de la gobernanza, la influencia de los grupos de interés y las organizaciones no gubernamentales (ONG) en las democracias representativas. En segundo lugar, en estos entornos, sostenemos que la comunicación y el encuadre de las partes interesadas—políticos, funcionarios gubernamentales, grupos de interés y ONGs—perjudican este sistema, en parte normalizándolo, oscureciendo las realidades científicas, desviando la atención de cuestiones más profundas y limitando así la posibilidad de soluciones sustantivas en lo que podría denominarse una colonización de la conciencia. En conjunto, este complejo económico-político-comunicativo no ha impedido—y en cierto modo ha favorecido—la mortandad masiva de especies animales autóctonas. El artículo sugiere explorar modelos alternativos, como la democracia deliberativa, a este problema aparentemente insoluble, para reforzar la influencia de los conocimientos científicos, informar mejor a los responsables de la toma de decisiones, hacer avanzar la comprensión pública de la ciencia y mejorar la democracia implicando a los ciudadanos en los procesos de toma de decisiones. Aunque este estudio se centra en Nueva Zelanda, las cuestiones relacionadas con la ecología política, los sistemas político-económicos y el encuadre de los problemas son aplicables a muchos países democráticos.

Palabras claves: animales, especies animales, biodiversidad, conservación, medio ambiente, extinción, encuadramiento, Nueva Zelanda, democracia deliberativa

1. Introduction

Similar to other parts of the world, much of New Zealand's native fauna faces extinction (MfE & Stats NZ, 2019a, 2022; Blue & Blunden, 2010). While some charismatic species, such as kiwi (Apteryx), have recovered from near extinction, many remain vulnerable to extinction, particularly species receiving scant public attention, such as kākahi (Echyridella menziesii), a freshwater mussel, and toanui/flesh-footed shearwater (Ardenna carneipes) (Blue & Blunden, 2010; Hare *et al*., 2019). While many factors contribute to species demise, the anthropogenic causes are rooted in politics and policies. In New Zealand, inadequate policy, oversight, and regulation over its primary industries, including farming, fishing, and forestry, have enabled continued pollution, habitat destruction, greenhouse gas emissions, and related damage that either directly or indirectly harm species. While failing to implement policies that would best protect biodiversity, the government acknowledged the dire state of ecosystems and biodiversity in its Environment Aotearoa reports, noting that almost 4,000 native species are either threatened or at risk of extinction (2019, 2022). These include 90 percent of seabirds, 80 percent of shorebirds, 26 percent of native marine mammals, and nine percent of sharks, rays, and chimaeras. Some, such as the Māui dolphin (Cephalorhynchus hectori maui), are in more dire condition with 54 individuals over the age of one year remaining, and 59 bird species, three frog, two reptiles, four insects and seven plant species have gone extinct (DOC, nd-a; MfE & Stats NZ, 2019a).

At the core of the problem is a trifecta of structural and systemic issues: the political structures, the economic system, and communication. Communication shores up the other two, obscuring the realities through simplistic, strategic framing, and limiting the awareness of potential solutions. This article explores these from a systems-level vantagepoint, contributing to the political ecology literature in four ways —

first, we analyze the failures in New Zealand's politics to stop extinctions of Indigenous fauna, while the country articulates a "clean, green" agenda. Secondly, using the New Zealand case, we explored the biodiversity cost in representative democracies that rely on pithy campaign slogans, soundbites that articulate "successes" while omitting failures, and maintaining economic growth to win elections. The latter goal requires deference to the economic engines of the nation, which include environmentally destructive industries. Thirdly, protecting some animal species (but not others) enables governments, NGOs, and others to claim progress or victory in species conservation while ignoring larger contextual realities. This is connected to our fourth contribution—the communication, or framing used by governments, interest groups and NGOs, sustains the status quo systems and structures that enable the practices leading to species decline and extinction. Framing maintains these systems partly by suggesting these structures and systems—the political-economy complex—are the only legitimate options, and by obscuring the realities of extinctions, suggesting that progress is being made, and obfuscating alternatives.

We first discuss the extinction-related literature of political ecology, then communication and framing, exploring how they obfuscate political and scientific realities, which are more complex and troubled than the frames acknowledge. We follow by examining the fractured governance approaches to animal conservation and analyze the framing by government, interest groups, and NGOs. Finally, we suggest that successful conservation for the remaining animal species needs a profound shift in public understandings, deliberation, and participation. However, because the public has been primed to think simplistically, rather than with scientific complexity, successful conservation may benefit from alternative democratic models (Bennett, 2016; Entman, 1996). One potential alternative is deliberative democracy, which embraces transparency, accuracy, expert knowledge, understandable public information, meaningful involvement, and a solutions-focus (Pirsoul & Armoudian, 2019). Such a model would recognize and embrace contradictions, tensions, seek scientific expertise, and genuinely representative viewpoints rather than catering overwhelmingly to overpowering special interest groups.

2. Political ecology and framing

Because "bio-cultural-political complexity" dynamics influence the natural environment, political ecology is central to understanding influences on animal extinction and conservation (Greenberg & Park, 1994; Büscher 2021; Bryant, 2015; Harcourt & Nelson, 2015). Recent literature emphasized "capitalist intensification of pressure on biological diversity" and shifting values (Büscher, 2021). As noted by Adams, the system—and the promise of a greening economy—have drawn conservationists to partner with destructive entities (2017; Le Billon, 2021). Thus, conservationists often work around the edges, hoping for win-win situations, but the likelihood is that their agreements empower extractive industries in "sustaining extinction" (Le Billon, 2021, p. 867; Dunlap & Jakobsen, 2020). As we discuss later, these are among the problems being masked by framing.

Creating protected areas and reserves have been key strategies, including in New Zealand. But research suggests that increasing protected areas—even to half the earth—ignores fundamental problems embedded in the pro-growth mantra, and they can disproportionately harm poor and Indigenous people (Brockington & Scholfield, 2010; Büscher *et al*., 2017; West *et al.,* 2006; Brockington & Duffy, 2011; Bluwstein, 2018). These efforts to conserve within market economies rely on underlying beliefs and normalization of neoliberal economic policies (Mercer *et al.*, 2014). As we discuss, these problems related to New Zealand's extinction crisis are obscured by a third factor – communication. The dominant framing buttresses these systems, even as they continue to deplete species and degrade the environment on which they rely. These connections are discussed following the section on framing.

2. Framing and reality

Frames, the mental constructs that organize and simplify a complicated world into meaningful, understandable, and often familiar themes, shape understandings, despite not always reflecting reality (Entman, 1993; 2007; Gamson, 1988; Armoudian, 2011). By choice of language, symbols, and the inclusion or omission of information, frames define problems, suggest solutions, guide understandings and misunderstandings, and inform policymaking (Rose & Baumgartner, 2013; Bell & Entman, 2011; Entman, 1993; Gamson, 1988; Lakoff, 2014; Nelson *et al.*, 1997; Snow & Benford, 1992). For example, economic frames emphasize the economics-related view of political problems; public health frames centre on health-related perspectives; blame frames and responsibility frames focus on the problems' causation; and game

frames depict politics as a competition rather than a public interest process (Semetko & Valkenburg, 2000; Armoudian, 2011; Iyengar, 1994; Patterson, 1994). In New Zealand, for example, the two major political parties, Labour and National, frame water as either (respectively) a human rights matter or an economic issue. Each frame suggests different policy directions for water quality management, which failed to protect thousands of people from water-borne illness (Armoudian & Pirsoul, 2020). Political actors use frames to convey, persuade and influence outcomes (Callaghan & Schnell, 2005).

Simple frames tend to distort reality and limit understandings that could otherwise contribute to best policies, particularly for complex environmental crises such as extinctions. When, for example, media used the false-balancing "he-said-she-said" frame, pitting climate scientists against fossil fuel industry-paid personnel, it created the illusion of a debate about the science and hampered mitigative policies (Armoudian, 2011; Boykoff & Boykoff, 2004). In New Zealand, farmers' organizations used similar "he-said-she-said" frames to shift responsibility for farming-related freshwater deterioration by challenging the validity of freshwater-related scientific research (Armoudian & Pirsoul, 2020).

Within societies, master frames or grand narratives become proxies for a shared sense of reality. Some master frames become so engrained that contradicting evidence generates cognitive dissonance and are thus rationalized away (Snow & Benford, 1992; Westin, 2007; Lyotard, 1993; Van Gorp, 2007), suggesting that familiar framing creates comfort, despite inaccuracies, and underlie unsuitable decisions.

Scientific realities can be difficult to convey to non-specialists, given their complexity (Sprain & Reinig, 2018; Kolandai-Matchett *et al.*, 2021; Kolandai-Matchett & Armoudian 2020). In electoral democracies, such as New Zealand, reliance on soundbites, slogans, short-term election cycles, and quick policy wins makes this conveyance more difficult (Boyd & Armoudian, 2020). In these framing contests, politicians and policymakers tend to engage in symbolic, superficial praxes that rarely challenge underlying economic and political structures at the heart of the policy failures to protect species and biodiversity (Baker, 2007; Peterson *et al.*, 2005, 2006).

To win political contests, politicians, policymakers, and other stakeholders use frames that neither convey the realities nor advance real solutions, the latter of which would require rethinking socio-political-economic structures. For example, for conservation, many frames tout the successes of preserving a few charismatic species but omit the failures, inactions, errors, and more contentious issues, thereby obscuring them from public understandings.

Euphemisms and ambiguous language similarly obscure scientific realities and disconnect citizens from potential actions. For example, economic language ("natural capital", "natural assets", "stock", "maximum sustainable yield") within anthropocentric frames reduces the natural world to utilitarian resources (Palliser & Dodson, 2019). Terms such as "by-catch", or "the (foreseeable) killing of non-targeted wildlife" when capturing and killing commercial marine species, soften hard realities. These pervasive frames and language contrast with eco-centric framing, which convey nature's intrinsic value.

Scientific uncertainties and probabilities are also used by industries to prevent protective policies and regulations and to shift norms and baselines (Oreskes & Conway, 2011; Armoudian, 2011; Soga & Gaston, 2018; Blühdorn, 2017). Standards for acceptable levels of pollution, environmental deterioration, carbon emissions, and thus wildlife extinctions rely partly on normative policy frameworks promoted by authorities. In New Zealand, shifting baselines are particularly evident in freshwater quality debates: acceptable nutrients, pathogen levels, and overall water quality data change when subjected to methods of measurements and statistical analyses that tend toward weak standards and benefit primary industries while providing "evidence" in case of public challenges (Joy & Canning, 2020).

Through framing, politicians and others can claim success by focusing on individual achievements amid larger systemic failures, which would paint a more dire picture. Framing further shapes beliefs about what is or is not possible. If, for example, from hegemonic framing, another way is never uttered, how can one imagine and advance alternatives? If societies are steeped in meta-frames that claim progress, why would people change their approaches? These frames also suggest a value system about what is and is not valuable, including some species but not others.

Further, environmental depletion and colonialism-based ontological hegemony has involved appropriating and reinterpreting Indigenous culture (Mignolo, 2009; Schulz, 2017; Todd, 2016), alongside more stealth influences, which we argue is a type of colonization of consciousness or of "the lifeworld" (Habermas, 1981; Thussu, 2008). Here, dominant, capitalist concepts in communication infrastructure, values, and framing, blind people to policy and action options, partly by suggesting this is "the way things

are" (Moewaka Barnes *et al.,* 2018; Armoudian, 2011). The framing, which prioritizes profit and growth values, clashes with conservation goals and Māori values and concepts. Yet in this system, the pro-growth, pro-profit priorities can overwhelm, compete with, or displace long-held traditional values.

3. Interest groups and framing

In many democracies, interest groups are influential with setting or altering policies that fail to conserve species while claiming to be sustainable. Generally, their framing minimizes and shifts focus away from harms caused by their industries, while symbolic discourse helps protect the interests of the beneficiaries of status quo. The discourse of reassurance, for example, involves societal coping mechanisms that facilitate acceptance and a "competitive scramble for limited resources" while disregarding planetary boundaries and pending catastrophes (Dryzek, 2013; Blühdorn, 2017, p. 56).

Public interest-oriented environmental organizations suggest alternatives that help protect some species but usually avoid deeper debates about necessary societal changes for more robust conservation. Their policy advocacy, usually incremental, tends to sustain "the unsustainable" by maintaining growth-centered consumer capitalism along a spectrum of greener alternatives that delay the inevitable (Blühdorn, 2007; Tienhaara, 2014). While there are "better" and "worse" environmental policies within consumer capitalism, the framing again obfuscates the realities and sidelines needed debate, including about values conflicts. Further, as we discuss, representative electoral democracies tend to rely on superficial framing, symbolic politics, avoid complexities, and similarly promote these omissions and avoidances (Blühdorn, 2007). And as noted earlier, some NGOs partner with the entities that are exacerbating extinctions.

The next section briefly discusses our research methods. We then offer an overview of New Zealand's governance for animal conservation and the framing used by actors and groups involved in these politics. Finally, we discuss deliberative democracy's potential to help overcome some problems arising from this system (Calvert & Warren, 2014). While not a panacea, this model can promote a political praxis that recenters political debates on scientific expertise, values and values systems, while increasing public understandings and participation in conservation policies (Fischer, 2004).

4. Methods

We relied on six sources: academic literature, government agencies' and interest groups' communication, located largely through their website materials, governmental and non-governmental reports, and news media. 1) For the structural, theoretical, and analytical foundations of this article, we began with the literature of natural science, political ecology, politics, and communication to contextualize the scope and nature of New Zealand's conservation, politics, and broader issues of conservation within democratic systems. 2) We searched media databases for articles related to animal conservation in New Zealand and incorporated them into the analysis. 3) For governance and governmental communication, we analyzed the content on key New Zealand agencies' websites, first to assess the governmental structures, policies, practices, and goals for animal and environmental conservation. Secondly, using framing analysis, we identified the main frames of animal conservation-related issues. 4) We repeated this process with interest group and conservation NGOs, studying the groups' communiques and websites, analyzing their frames' focus and omissions. 5) Based on the literature and this data, we theorized about the influence of these frames on conservation-related policies and outcomes. 6) We interviewed three NGO leaders and a staff person in a government conservation-related department to clarify conservation law and policy. 7) Based upon successful models and the literature, we explored how deliberative democracy might expand and enrich participation and knowledge, broaden and deepen the discourse, including the science and issues omitted by the framing.

5. Animal conservation in New Zealand

Demonstrating how sound practices can support conservation, New Zealand has successfully conserved some species with fenced ecosanctuaries and island reserves that protect them from predators and other stressors (Burns *et al*., 2012; Innes *et al.,* 2019). Animal-charisma, public attention and scientific interest have been key factors to successes (Nelson *et al*., 2019). For example, until recently, tuataras (Sphenodon punctatus) were declining, but now approximately 55,000 tuataras live on offshore islands and in ecosanctuaries in the country's North Island, with improving populations due to robust recovery efforts (Nelson *et al*., 2019, p. 287; DOC, 2001). As the only living representatives of an order of reptiles

(Sphenodontia), which traces back to the age of dinosaurs, tuataras attract scientific research interest and are considered a treasure by Māori.

New Zealand gives birds considerable public attention with programs such as "Bird of the Year" elections, and specific conservation initiatives have succeeded (Bird of the Year, 2022). Protected areas and predator eradication have helped preserve, for example, the kererū (Hemiphaga novaeseelandiae) and the kākā (Nestor meridionalis) (Fea *et al.*, 2021). However, as noted earlier, New Zealand's native fauna are, overall, in peril (DOC, 2019). Some species continue to decline despite conservation efforts, while others receive less public and scientific attention (Hare *et al.,* 2019; MfE & Stats NZ 2019a). As noted, 90 percent of seabirds and 80 percent of shorebirds are either threatened or at risk of extinction, and 59 bird species have gone extinct (MfE & Stats NZ, 2019a). Among them, despite recovery programs, only 216 kākāpō (Strigops habroptilus), a large flightless nocturnal green parrot, remain with problems of genetic inbreeding (White *et al.,* 2015). Another flightless bird, the takahē (Porphyrio hochstetteri), has declined to about 440 individuals, following a "stoat plague" (Hegg *et al.,* 2012; DOC, 2021). While bird numbers in sanctuaries are encouraging, survival in the wild remains concerning. The hoiho, or yellow-eyed penguin (Eudyptula minor), among the world's rarest penguins, is among the most threatened, largely due to human disturbance, introduced and natural predators, the destruction of habitat, ocean health, and fishing practices (DOC, nd-a).

Marine animals are also struggling to survive (MfE & Stats NZ, 2019b). As noted earlier, the Māui dolphin, endemic to New Zealand, is critically endangered with roughly 54 individuals over a year-old remaining (DOC, nd-b). Although predation from sharks and the threat from toxoplasmosis threaten these animals, the fishing industry jeopardizes dwindling populations, with net entanglements that drown and injure dolphins (Hare *et al.,* 2019, p. 303; Slooten, 2013). While oceanic changes cannot be remedied by New Zealand alone, harmful fishing practices, poor reporting, and under-regulated tourism can be mitigated through policies and enforcement (Simmons *et al.,* 2016; Forest & Bird, 2021; Bell *et al*., 2020).

The deterioration of lakes and rivers threatening New Zealand's freshwater fauna is linked to farming and dairy intensification (Joy *et al.*, 2019; Larned *et al*., 2016; Weeks *et al*., 2016). Fertilizer use, sediment from deforestation, wetland removal, and cow and sheep effluent runoffs pollute underground water, streams, and rivers, which degrade larger bodies of water and threaten freshwater species (MfE & Stats NZ, 2022; Foote *et al.,* 2015). These less charismatic species attract little public interest. For example, different species of kākahi, a freshwater mussel, are threatened or at risk (Hare *et al.,* 2019), and around three-quarters of New Zealand's known native freshwater fish are threatened with extinction. While introduced species, such as trout and salmon, are protected against commercial harvesting, some threatened native fish, such as freshwater eels (Anguilla dieffenbachii), are not (Wright, 2013). The next sections discuss the politics that seek to protect New Zealand's native species from extinction.

6. New Zealand's conservation governance and framing

The core of New Zealand's environmental governance is the Treaty of Waitangi, the agreement signed between the British Crown and approximately 540 Māori chiefs on February 6, 1840, and reflects principles of governance and sovereignty. While the final meaning of the treaty has some contestation, Māori interpret the agreement as retaining their full authority over *taonga*, or "treasures", which includes much of nature (Craig *et al.,* 2012). Following the Treaty's signing, European settlers forcibly removed Māori communities from tribal lands for resource extraction and conversion to farmland and suppressed local cultural practices and knowledge, including conservation and sustainability methods (Roberts *et al.*, 1995).

In 1975, the Waitangi Tribunal was founded to provide a legal process by which unresolved Treaty grievances and injustices could be investigated (Waitangi Tribunal, 2017). With authority to determine the Treaty's meanings, it has heard over 2,000 claims, several involving environmental governance and resource management (*ibid*). Claims settlements at the Tribunal include the Waikato Raupatu Claims Settlement Act 1995 and the Ngāi Tahu Claims Settlement Act of 1998, which, in addition to redressing historical injury, paved the way for *iwi* (tribes) to regain power in conservation and recovery (Ruru *et al.,* 2017).

Māori are considered guardians of the environment and play crucial roles in New Zealand's conservation through traditional concepts, such as *Kaitiakitanga* (roughly meaning stewardship) (Ruru *et al.,* 2017). For example, from Māori influence, the Whanganui River and Te Uruwera Forest gained

recognition as legal persons with their own rights (Ruru *et al*., 2017; Kauffman, 2020). The practice of *rāhui*, or limiting access to natural resources for restoration, or the replenishment of *mauri* (life essence), is increasingly implemented in fisheries and wetland management, and has gained significance in New Zealand conservation legislation (Wheen & Ruru, 2011). In its environmental reforms (discussed below), the Labour government sought to incorporate additional Māori-Crown co-governance measures to integrate Māori stewardship for the natural world (MfE & Stats NZ, 2022; Labour, 2020).

Environmental governance

In 1986 and 1987, New Zealand created the Ministry for the Environment and the Department of Conservation (DOC), respectively. With a mission to manage New Zealand's natural and cultural heritage, DOC's work includes high levels of public input and increasing public awareness of New Zealand's vulnerable species (Seabrook-Davidson & Brunton, 2014). DOC administers 25 Acts of Parliament, including the Resource Management Act 1991, the Fisheries Acts of 1983 and 1996, the Biosecurity Act 1993, the Forest and Rural Fires Act 1977, and the Crown Pastoral Land Act 1998 (DOC, nd-a). Because it maintains parks and reserves, DOC also plays a role in the "conservation economy" through tourism (Dinica, 2017).

During its first three years, DOC dealt with three different ministers and three directors-general and suffered from restructuring and underfunding, leading staff within the organization to adopt a "culture of 'making do' on limited budgets" (Taylor, 2013, p. 18; Stuff, 2013; Towns *et al.,* 2019, p. 248). However, reaching an all-time high, DOC's funding increased from NZ$600m (approx. US$380m) in 2021/22 to NZ$667m (US$420m) in 2022/23 from NZ$499 million (US$420m) in 2019/20 (DOC, 2022).

As part of neoliberal restructuring of New Zealand's public sector, the government reformed the country's environmental and planning laws. Supported by both leading political parties, it enacted the Resource Management Act 1991 (RMA), which supported economic growth that is largely dependent on farming and fishing industries, both which degrade New Zealand's environment (Norman & Gill, 2011). While the RMA was then considered a model environmental act, it became regarded as outdated and unnecessarily complex by a range of political and economic actors, including environmental groups, Māori, businesses, developers, and farmers (Brown *et al.,* 2016; Vince, 2006; Harris, 2020). While it underdelivered on environmental protections, the RMA faced criticism for long, costly consultation and bureaucracy that slowed urban growth and planning (Small, 2021).

In February 2021, the sixth Labour Government confirmed it would repeal and replace the RMA by three acts to manage the natural environment, support building and development, and improve recognition of *Te Ao Māori* (the Māori world view) and *Te Tiriti o Waitangi* (the Treaty of Waitangi) (New Zealand Government, 2021). Using a "win-win" frame, it proposed the Natural and Built Environments Act (NBA) to "provide for land use and environmental regulation" through "positive outcomes" for development "within prescribed environmental limits." This approach, aiming to both protect and develop the environment, veers from simply managing adverse effects, as past governments had done. Secondly, the Strategic Planning Act (SPA) would integrate development-related legislation, "require long-term regional spatial strategies", and give "strategic direction" for the NBA. Thirdly, the Climate Change Adaptation Act (CAA) will address "managed retreat and funding and financing adaptation" (New Zealand Government, 2021). In official communiques, Minister for the Environment David Parker also used "win-win" frames: With NZ$179 million (approx. US$115m) in the 2022 budget, "the new laws will improve the natural environment, enable more development within environmental limits, provide an effective role for Māori, and improve housing supply and affordability" by "simplifying planning processes, reducing costs and times" (New Zealand Government, 2021).

To date, the CAA appears to focus on mitigating the effects rather than causes of climate change, such as emissions from its primary industries. In 2020, New Zealand declared a climate emergency to be "at the forefront of climate action" with "long-term action to reduce emissions" (New Zealand Government, 2020). It introduced incentives for purchasing electric vehicles and committed a forecasted NZ$4.5 billion (approx. US$2.9bn) over four years for the Climate Emergency Response Fund, while largely ignoring emissions and environmental degradation from industries such as agriculture and fishing that impact native fauna (RNZ, 2021; Treasury, 2021; Stats NZ, 2021a).

New Zealand's conservation governance also includes the Environmental Protection Authority (EPA), an Environment Court, and agencies to regulate the fishing industry (Warnock, 2014). While local

entities have had regulatory and implementation authority over other environmental issues and policies—including resource management, flood control, air and water quality, pest control, regional parks, and, in specific cases, public transportation—proposals to change water regulation are in process, primarily arising from failures to protect human health (LGNZ, nd). The Three Waters reforms, if passed, will regulate drinking water, wastewater and stormwater within a co-governance structure that recognizes Māori rights and interests alongside establishing a Crown monitor to oversee and intervene if a water service entity fails in its duties (DIA, nd). Freshwater issues, which had largely remained in the domain of regional authorities, are being coordinated between levels of power alongside investments in water infrastructure. Focused primarily on benefiting people, biodiversity and species will likely benefit inadvertently from aspects of the program (DIA, nd).

Justification for the reform blames "network failures" for pollution "spilling onto our beaches and … rivers", framing New Zealand's polluted waterways as infrastructural problems rather than degradation from farming, fishing, or industrial activity (DIA, nd). Further framing in discussion documents touts "better" water, and a "win-win" program that will improve multiple goals, including investment, economics, finance, work flexibility, service, health, and the environment (*ibid*). But again, two main sources of environmental degradation – farming and fishing practices – remained essentially off-limits for discussion or major reforms, both of which are necessary to truly conserve and protect biodiversity. This is discussed next.

7. Interest groups, framing, and environmental politics

Farming

New Zealand's economy is highly dependent on farming, particularly its dairy industry. In the year to March 2022, the 4.8 million dairy cows in New Zealand earned export revenue of almost NZ$18 billion (approx. US$14.5bn) for its farmers, making dairy the primary source of export revenue, representing 27.3% of total exports (Stats NZ, 2022a; Stats NZ, 2022b). While relying on New Zealand's "clean, green" self-framing to appeal in global markets, this "cash cow" industry profoundly damages the environment on which native species rely, via increased exploitation of freshwater sources, habitat modifications, and water quality impacts (Allibone *et al.,* 2010; Blackett & Le Heron, 2008; Wright, 2015). Each cow produces the equivalent waste of approximately 16 people (Wright, 2015). Thus, rather than a sparsely populated five million people, New Zealand could be considered the equivalent of a population of over 80 million.

Given its economic role in the country, the dairy industry wields influence on environmental decisions, particularly at regional levels, where councils maintain close connections with the farming industry (Brown *et al.,* 2016, p. 20). A 2018 report revealed that half of all regional councils, accounting for three quarters of New Zealand's dairy farms, were not conducting annual inspections or prosecuting cases of serious non-compliance of effluent discharge (Forest & Bird, 2018). Most conservation lands, meanwhile, are designated in upland areas unsuitable for farming (Joy & McLean, 2019; Pannell *et al.,* 2021).

Commercial, political and public pressures to improve environmental performance ostensibly influenced the agriculture industry to address sustainability concerns (Jay, 2007). But despite receiving nearly NZ$339 million (approx. US$215m) for research and technological solutions to address the problems arising from the sheer number of cows on the land, there has been little substantive change (Treasury, 2022, p.34). The Clean Streams Accord (2003), Sustainable Dairying: Water Accord (2013), and the Strategy for Sustainable Dairy Farming 2013-2020, for example, still favor self-regulation, leaving a polluting industry to largely self-monitor (Wright, 2015). Relying on "progress" and "sustainability" frames, the industry-supported initiatives continue to obfuscate the problems. For example, Fonterra, a multinational publicly-traded dairy co-operative owned by more than 10,000 farmers, frames itself as "embracing sustainability" with Māori values of being "connected to the land." Its two sentence self-description uses the word "good" four times: "everyday good people . . . do good things with dairy . . . good things with the land. . . good things for the people." Its submission to the Climate Commission admitted to emitting a high percentage of the country's greenhouse gases, detailed its "progress", stated goals for reduction, and requested more funding for methane emissions reduction (Fonterra, 2021).

The government acknowledged, "New Zealand's economic security depends on our primary sector, which this year earned us a record [NZ]$53.3 billion", (approx. US$33bn) and articulated additional win-

win framing: "Our future competitive edge in food and fiber will depend on demonstrating our sustainability credentials to ever more discerning consumers" (New Zealand Government, 2022, para 3). Its "solution" included adding NZ$26 million (approx. US$16.5m) to its budget to study farming sustainability. Potential reforms include "diverse pastures for grazing animals" and "regenerative farming practices" (*ibid*).

Fisheries

Similar to dairy, fishing industry practices harm native New Zealand animal species, while playing a major economic and political role in the country (MfE & Stats NZ, 2019b). The commercial fishing industry harvests approximately 450,000 tons of seafood (excluding aquaculture) annually, and in 2017 employed over 14,000 people and earned NZ$2.0 billion (approx. US$1.3bn) in export revenue (MfE & Stats NZ, 2019b). Governance has historically emphasized self-regulation, and some incidents suggest influence toward maintaining this system. For example, while political party NZ First (then a government partner with Labour) expressed reticence toward the government's plan to install cameras on boats for monitoring and enforcement, it was revealed that the fisheries were contributing to a foundation linked to the party (Espiner & Newton 2020; Frykberg, 2020).

As another 'win-win' effort, the 1996 Fisheries Act focused on ensuring both utilization and sustainability using a quota management system (QMS). In 2021, 79 percent of fish stocks assessed were considered to be either at or above management targets (Cryer *et al.,* 2016; MPI, 2022a). This number fluctuates, yet accuracy is challenging because the QMS relies on self-reporting without strong incentives or bans, according to department staff (Interviewee #4, 2022). That includes protected species, which can be caught but are supposed to be reported (*ibid*). However, reporting appears insufficient. For example, in 2018, up to 32% of fish caught were not assessed by the system (MfE & Stats NZ 2019b). Without sufficient monitoring, violations remain unknown and thus unregulated (McCormack, 2017). Two reports illustrate this problem: In 2019, when government observers were aboard vessels, accounts of seabird by-catch on commercial long lining trips targeting migratory species jumped from 4 percent to 37 percent (MPI, 2019). In 2016, 13 of the 14 reports of penguin by-catch deaths were reported by government observers, who accompanied only three percent of commercial fishing boats (Forest & Bird, 2017). These matters are exacerbated by a "lack of knowledge about many species" and vague language in the Fisheries Act, which suggests that "nothing is really illegal as long as you take steps . . . and report" (Interviewee #4). In 2017, a journalist revealed that the Ministry for Primary Industries (MPI) had outsourced catch monitoring duties to the company FishServe, which is owned by the industry's biggest lobby group, Seafood New Zealand (Johnston, 2017). Here, the industry that is damaging the environment and benefiting from externalization was monitoring itself. However, black market sales can result in criminal charges, which occurred when a couple tried selling hundreds of crayfish online (Inside Government, 2022).

Given the industry's environmental impacts, environmental organizations publicly called for reforms. The seafood giant, Sealord, responded with a media campaign, framing itself as sustainable, fair and transparent while facing charges of illegal fishing activities (O'Connell, 2017; Quinlivan & Gordon, 2020). Its "win-win" frame included prosperity, social responsibility and environmental stewardship, and claimed compliance with sustainability standards (Sealord, 2012). Environmental groups, such as Greenpeace, parodied the campaign as merely "sustainability of their image" (Greenpeace, 2012).

In addition to excessive bycatches, historically poor enforcement has also failed to prevent labor standards violations; and the quota system, while creating a type of governability, reproduces marginality among smaller fishers (NIWA, nd; McCormack, 2017; Torkington, 2016; Stringer *et al.,* 2016; Song *et al.,* 2019). After allegations of illegal dumping, inhumane labor conditions, and human trafficking, the government banned foreign-flagged fishing vessels from operating in New Zealand waters from 2016, forcing them to re-flag as New Zealand vessels under domestic labor and environmental laws (Stringer & Harré, 2019). In mid-2022, to boost reporting transparency, the government began a two-year rollout to equip 300 inshore fishing vessels with cameras (MPI, 2022b). While environmental groups celebrated this as a win for threatened biodiversity, fisheries groups complained about costs and privacy concerns (Forest & Bird, 2021; WWF, 2021; Seafood New Zealand, 2022). Despite this legislation, the gap in understandings about the ecological impact of fisheries persists (MfE & Stats NZ, 2022).

Profit and Indigenous values

Prioritizing the pro-growth and pro-profit ethos can clash with both conservation and traditional Indigenous values. In New Zealand, Māori values have been central to sustainability. Māori have taken legal action against the government over freshwater mismanagement, asserted their rights over the South Island's freshwater (Johnsen, 2020), and as noted, won protections via personhood rights for a forest and river. However, other rivers remain without protection, noted environmental advocates. Endowed with rights of legal personhood, the Whanganui River is "not really at the center of dairy intensification", argued an NGO leader (2021). "If you had given [personhood] to the Waikato River . . . that would be a different story" (2021). This again reflects the agriculture industry's power.

In some cases, embedding Māori into the current economic system has shifted some *iwi* (tribes) toward corporatized production and development, using similar "win-win" and "sustainability" frames (Rata, 2003). A few *iwi*'s increased involvement in dairying, for example, has resulted in clearing and converting large forests into dairy farms (Phillips *et al*., 2016; Chalmers, 2018; RNZ, 2011). Using a win-win frame, one Māori farming company emphasized "financial, environmental and social outcomes" while "lifting productivity", which included expansion from eight to 14 dairy farms and to 14,000 cows (Ngāi Tahu Farming, nd; Chalmers, 2018).

Māori rights to seafood resulted in fisheries settlements whereby Māori gained control over one-third of New Zealand's commercial fisheries (Memon & Kirk, 2011), including half ownership of the corporation Sealord, with the other half retained by global seafood company Nippon Suisan Kaisha (Moon, 1998). In these cases, colonisers have not only dispossessed Indigenous people from their traditional lands, customs and implemented a system that clashed with Māori values, but they have enlisted some *iwi* into this unsustainable system.

NGOs

In addition to international environmental NGOs, such as Greenpeace and the WWF, local groups advocate for environmental protection and conservation. Forest and Bird, the country's largest environmental organization, acknowledges "big trouble" for Indigenous species arising from introduced predators, development, intensive farming, fishing, and climate change, while simultaneously using "win-win" frames in pleas for corporate sponsorship (Forest & Bird, nd). For example, the organization offers to "help meet your business objectives and contribute to conservation" and credits itself for improving "institutional arrangements for protected area and resource management; including the establishment of [DOC] . . . and the . . . Resource Management Act" (Lovelock, 2005, p. 531-532).

Fish and Game, another influential organization (funded through the sale of fishing and hunting licenses), seeks to maintain the environment for hunting and fishing purposes. Its 2002 "dirty dairying" campaign exposed environmental damage from dairy farming, which led to the "Sustainable Dairying Water Accord" (Holland, 2015). The farming industry's response was largely a "blame frame", arguing that environmental organizations and the media created a climate of distrust and disrespect for New Zealand's farmers (Armoudian, 2011; Duncan, 2017). Fish and Game have since shifted to the "win-win" frame, declaring, "Fish & Game is NOT anti-farming, we are pro-environmentally sustainable farming" (Fish & Game, nd).

Smaller NGOs and environmental community groups are partly constrained due to funding issues. Besides government agencies, community groups can apply for funding from trusts and foundations set up in the names of corporations (DOC, nd-c). Funding can bias activities towards these companies while helping "greenwash" their detrimental activities with "win-win" framing (Lyon & Montgomery, 2015). For example, the Yellow Eyed Penguin Trust is funded by Fonterra-owned Mainland Cheese (Yellow Eyed Penguin Trust, nd). While benefitting from the public relations image of helping an endangered charismatic species, Fonterra is being accused of greenwashing by obscuring its environmentally detrimental activities, including global shipping of Mainland products (NZ Herald, 2019).

Some NGOs seek to change the discourse and push for policy changes, while acknowledging that they cannot affect much, due to the outsized economic influence of primary industries (Interview NGO leader #1, 2022). For example, an NGO leader argued that the government's newly formed "Climate Commission is framed right from the get-go to be weak on agribusiness" and "lets agribusiness off the hook on climate change, almost entirely." One regional council was "abolished . . . to facilitate intensive dairy."

Moreover, the interviewee argued that the "influence of agriculture" has profoundly limited "protection for lowland habitats" (*ibid*).

Unlike other jurisdictions, such as the U.S., litigation offers limited options. NGOs have recently joined forces as "All Aboard" to demand judicial review related to the government's climate action plans. Because "the statute says the land transport plan must contribute to a safe, effective and efficient public transport system", the organization brought a "case against Auckland Transport and Council for failure to reduce emissions", said one of the group's leaders (Interview NGO leader #3). Although not specifically about species preservation, substantive actions arising from the lawsuit could inadvertently benefit species. However, in New Zealand, these lawsuits are rare and mostly limited to court declarations about the government's decisions and their accordance with law. In fact, litigation has mostly been in favor of "private clients trying to pursue private interests", used strategically to forward development, argued another NGO leader: "It's been, 'how can we enable this subdivision to go ahead?'" The leader added, "That's an overgeneralization and not entirely fair" (Interview NGO leader #2, 2021).

7. Discussion: framing, discourse and conservation policy

As noted earlier, despite New Zealand's conservation efforts, much of its native fauna are threatened and many have gone extinct. The combined systems of consumerism, pro-growth capitalism, and representative democracy emphasizes short-term solutions and a general consensus about political-economic systems, which make robust solutions difficult to address, while political communication affirms this consensus and supports the status quo, only permitting incremental changes (Mouffe, 2000). As Peterson *et al.* argued, "environmental decision-making rooted in this epistemology . . . has been used to legitimize existing patterns of environmental degradation" (2005: 763).

As we showed, even the most ardent protectionists' frames promote aspects of conservation, including protecting some charismatic species, without addressing deeper, socio-economic causes of extinction. This "progress" framing offers comfort and justification for increasing budgets, supporting NGOs, while boosting tourism in ecosanctuaries. This trend, while meaningful, distracts from the demise of other species that cannot survive in an environment damaged by growth ideologies. Thus, by focusing on "progress", "win-win", or "solutions" framing and symbolic politics, New Zealand and other capitalist democracies avoid examining deeper socio-economic and political structures that perpetuate the problems and promote policies that ultimately fail to protect most native fauna. Aside from superficial disagreements, the industries usually laud these scenarios because they do not threaten profits, and authorities promote these policies over others that could arrest extinctions and protect biodiversity (Norton *et al*., 2020). For example, "Predator-Free New Zealand" initiatives gained support from the primary industries, such as agriculture, because eradicating introduced predators also reduces negative impacts on profits (Russell *et al.,* 2015). Meanwhile, policies that would better protect species, such as curbing the farming industry's freshwater degradation to improve conditions for freshwater fauna, were avoided. New Zealand's collaborative governance and co-management initiatives for freshwater similarly emphasize "win-win" scenarios, which inadequately address freshwater quality, and offer minimal democratic engagement (Pirsoul & Armoudian, 2019). In-depth public debate about species conservation could expose contradictions between our ways of life and ecological imperatives and shine a light onto conflicting values that need reflection over the meaning(s) of the "good life." This suggests the current political system is inadequate for seemingly intractable problems.

8. Accepting disagreement and incorporating sortition

While New Zealand's political-economic systems perpetuate threats and extinctions of much native fauna, there has been little public outcry. We argue that this is because of framing, symbolic politics, vague language and coping mechanisms that obscure scientific realities, interconnections with political-economic structures, inadequate political systems and policies, and influence by primary industries that has shifted baselines.

Like other electoral democracies, New Zealand's reliance on campaigns, elections, superficial discourse, minimal engagement, and short-term solutions kicks the proverbial can down the road, offering incremental changes that protect a few charismatic species (Palliser & Dodson, 2019). By shifting attention away from more comprehensive solutions, these types of communication displace necessary debate about the political-economic structures that are pushing the environmental crises to their brink. Further, as groups,

such as Indigenous communities, which had historically offered alternative paradigms, are integrated into pro-growth ideologies, some have joined in capitalist intensification (Hale, 2004; Pirsoul, 2017). The public, meanwhile, have few options to participate in policymaking and are generally restricted to volunteering, donations, submissions, demonstrating, or voting.

Scholars have examined various reforms to minimize the influence of powerful industries (e.g. Kuhner, 2021). But because the problems are embedded in the political-economic structures and value systems, without profound changes, these will not arrest species extinctions. There are, however, alternatives, such as deliberative democracy, that have shown promise in improving discourse and more realistically juxtaposing the scientific realities against core assumptions and ideologies, rather than relying on incrementalism that doesn't address power structures (Ford, 2002; Fraser & Honneth, 2003). Alternatives require transparency and more frequent public debates with clearer understandings about the realities – the systems that are driving extinctions, and the framing that obfuscates scientific realities. Transparent deliberation can facilitate learning by encompassing successes, failures, their root causes, recognition about scientific uncertainties, understandings about injustices arising from colonization, and Indigenous histories and customs (McAfee *et al.,* 2019; Catalano *et al.,* 2019). Philosophically difficult questions and hard choices about conflicting values and interests and potential overhauls need substantive debate (Wilson *et al.,* 2011).

Rather than relying on high frequency participants – stakeholders with strong vested interests – in consultations, deliberative democracy models for species conservation and biodiversity could better represent societies and produce more meaningful understandings and more holistic decisions. Instead of elections or appointments, sortition, a scientific random sample of the population, determines membership for the deliberative body, guaranteeing representativeness of a given population (Læssøe, 2007; Fishkin, 2009). In well-designed deliberative processes, deliberative citizens' assemblies have made important political decisions on environmental issues, effectively triumphing over symbolic politics and "wallpaper democracy" (Niemeyer, 2004, 2007; Fishkin, 2009). Sortition-based deliberative assemblies were embedded within the existing political apparatus in Belgium, and were used to successfully design energy policy plans in the Dutch city of Utrecht (Niessen & Reuchamps, 2020; Meijer *et al.,* 2017). In Australia, a citizens' deliberative jury was created to consider the future of a controversial road project (the Bloomfield Track) in a mountainous rainforest with inshore coral reefs, which had become a bitter "symbolic political spectacle" (Niemeyer, 2007). Guided by a facilitator, a four-day process included presentations from experts and community members, deliberation among the citizen jurors, and questions to the presenters. The jury's majority voted to close the Track due to ecological and cultural impacts, availability of community access, tourism alternatives, costs, and other impacts. The process enabled ordinary citizens to analyze a complex environmental issue and make decisions that were grounded in scientific and cultural realities (*ibid*). Australian citizens also used deliberative democracy for climate change policy. Focusing on substantive issues and the complexities of climate change, the process also activated environmental values and built trust. Previous government distrust shifted to perceiving a partnership with citizens with a "collective identity" toward solving common good problems (Niemeyer, 2013: 444).

In contrast, in New Zealand's nationwide consultations on freshwater reforms featured interest groups using emotionally-laden attacks on a relatively ambiguous plan in public meetings (Piddock, 2019; MfE & MPI, 2018). A deliberative approach would instead randomly select citizens to deliberate with scientists, Māori, and other affected parties, to understand objective and subjective aspects of the issues before concluding, ideally integrating Māori customs, Indigenous knowledge, protection of *taonga,* and sovereignty issues. This process could apply to additional environmental policies affecting animal species and would diminish primary industries' influence over the fate of New Zealand's native fauna in favor of more robust democratic participation and increased influence of scientific experts. This potentially offers better prospects for protecting animal species that ultimately depend on human agency for their survival (Whiteside, 2013).

9. Conclusion

This article has explored a systems-level politics of animal conservation and extinction, in essence the "bio-cultural-political-complex" (Greenberg & Park, 1994; Büscher 2021; Bryant, 2015; Harcourt & Nelson, 2015). We showed how New Zealand, which gives commercial interest groups disproportionate influence in policymaking, has prevented effective policies that could protect the country's Indigenous

animal species from extinction. The country has created a complicated, undercoordinated system of disparate policies, departments, and agencies that each manage aspects of conservation but overall fail in protecting animal species and their requisite environments. Within the process of "capitalist intensification" (Büscher, 2021), freshwater species struggle to survive in pollution-laden waters, and marine species, such as Maui dolphins, are victim to overzealous fishing practices and environmental degradation. Efforts to conserve within greener market economies has drawn conservationists to partner with destructive entities that ultimately "sustain extinction" (Adams, 2017; Le Billon, 2021; Dunlap & Jakobsen, 2020). These include legal protections, including reserves, around the edges of exploitable regions, where the worst degradation is occurring.

While they continue to deplete species, degrade habitat, and worsen climate change, this system and its structures at the heart of the failures are buttressed by communication. The framing by politicians, policymakers, interest groups and many NGOs obscures scientific realities, political failures, and real comprehensive solutions in favor of the status quo. "Win-win", "sustainability", "progress" and "blame" frames that focus on the few successes of protecting charismatic animals have distracted from serious harm done to other species and biodiversity. These frames further mask problems arising from these political-economic structures that promote profit as the primary value. Parties and candidates then compete in electoral cycles that ultimately reproduce the status quo and disincentivize discourse about fundamental economic and political structures of society, including New Zealand's economic reliance on destructive industries, including agriculture and fishing.

Sortition-based participatory democracy could diminish these industries' disproportionate policymaking power and empower scientific experts and the public. The approach has shown promise in tackling vexing political issues and is growing in Europe, Australia, Canada and beyond. In this system, random samples of citizen juries, selected through a lottery, rather than through elections, engage with scientists and other experts, deliberate on the issues, and make decisions after understanding the realities. Sortition ensures a more representative body, and because participants do not need to raise funds or run for office, they can give more weight to the science and debate rarely-discussed matters, including the economics and value systems that limit the range of policies, rather than restricting policies to insufficient, incremental changes.

As noted, deliberative democracy approaches have been shown in some instances to help develop trust, a critical component of democracy that is currently in decline. In 2021, across 22 wealthy nations, roughly half of citizens trusted their government partly because of the lack of "equal access to policy-making processes" (OECD, 2021). Approximately 40 percent of respondents believed their government would change a national policy "in response to public demands", and only a third said their countries allowed their voices to be heard (*ibid*).

In New Zealand, 75 percent of citizens believe that individuals have a responsibility to help address climate change (MfE, 2018). Anti-dairy demonstrations outside parliament and student protests across the country demanding more action on climate change displayed sentiments for New Zealand to expand environmental protections (Newshub, 2022; RNZ, 2022). But these actions do little to move policy (Rochan & Mazmanian, 1993). Deliberative democracy could instead give them a proportionate seat at the table to study and learn the science and deliberate on potential solutions. While deliberative democracy is no panacea, this form of democracy enables greater inclusion in ecological and conservation policy decisions, allowing ordinary citizens opportunities to address fundamental questions related to protecting its indigenous animal species.

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