

Different Meanings of 'Nature' for New Zealand's Conservation Institutions

'Conservation matters', New Zealand's Department of Conservation (DOC) briefed its new minister in 2014, because 'New Zealand's natural heritage shapes the country's cultural identity and ... New Zealanders identify strongly with conservation lands and waters' (Department of Conservation, 2014, p.4). It further explained that the benefits of conservation are much more than improving health and well-being and contributing to a sense of personal achievement. Conservation protects natural capital, delivers infrastructure, and underpins New Zealand's primary production sector and tourism. In short, the country's national and conservation parks and native biodiversity benefit the country's economy, prosperity and future well-being. DOC then informed the minister that New Zealand's

biodiversity is declining; its unique native fauna and flora and ecosystem services are reducing. Although the text conflates natural heritage with the outdoors, conservation and biodiversity, it is clear throughout that DOC is referring to New Zealand's nature: the phenomena of New Zealand's physical world, as opposed to its humans or human creations.

It is also clear that DOC frames nature in terms of its utility, underpinned by contemporary conservation theory. Thus, DOC justifies conservation using an ecological economics theory of ecosystem services which holds that natural systems provide unaccounted, but significant, services and economic benefits to society (Daily, 1997). Similarly, DOC's framing of conservation as biota and biodiversity aligns with what Soulé and Lease call 'the living nature of the contemporary Western Biologist' (Soulé and Lease, 1995, p.140). 'Natural landscape' is for DOC synonymous with ecosystems, but also the primary reason 35% of international visitors come to New Zealand. Other meanings of nature are referred to in passing; but, while iwi are identified as partners for addressing key conservation issues, iwi views of nature are not mentioned.

Simmons (1993) suggests that the environment, or nature, is complex and does not lend itself to a simple, dictionary-like meaning. He argues that humans have not only biophysical surroundings, but an environment that is understood culturally. Critically, as Botkin (1990) points out, how we conceptualise nature determines how we treat it. This cultural understanding is reflected in DOC's reference to cultural identity, but also in its framing of nature as 'conservation economy' (Dinica, 2015) to justify its activities.

Laws, themselves cultural artefacts, can be seen as a crystallisation of society's dominant values and knowledge at the time they are drafted. However, society's understandings of the environment and how it values nature can and do change over time. From a fringe interest, the environment is now part of mainstream public discourse, with public interest in native species decline, freshwater

provided a touchstone for New Zealand's environmental movement (Williams, 1980), and in turn the government restructuring that led to the formation of DOC and the Ministry for the Environment. More recently we have seen legislation passed as part of settlement packages agreed by the government to address individual iwi claims under the Treaty of Waitangi. These settlements introduce new governance arrangements, but they also explicitly recognise Māori world views of the environment which transcend western scientific ones.

The laws addressing how people utilise the environment were reviewed in the 1980s, with nearly 60 laws repealed and the same number again amended, quite in addition to a new approach being established for managing and utilising parts of the environment under the Resource Management Act 1991 (RMA). Today, regional councils, the

aspect of the management or protection of some part of New Zealand's natural, as opposed to built, environment. Different meanings of nature manifested in the legislation, suggested by words used in the titles, long titles and purpose statements of individual acts, as well as the scope of the legislation, are identified. Reference is also made to definitions in the interpretation sections. It recognises that legislation is amended over time, and refers to previous legislation where appropriate to identify whether new discourses are imported or replace existing ones.

While this survey focuses mostly on the laws that DOC administers, it also includes laws governing use of New Zealand's native biota administered by other departments: for example, those managing fisheries and native forestry harvesting, administered by the Ministry for Primary Industries. This study does not consider how the legislation is implemented.

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Meanings of nature in New Zealand legislation

An overview of New Zealand's nature management legislation reveals no single or consistent meaning of nature (Table 1). The different laws operate at different scales, both in their focus, from individual species to whole landscapes, and in spatial terms, from subnational areas such as national parks or iwi rohe (tribal areas) to international. However, the wording within the suite of nature management laws suggests three themes to explore: how nature is defined; its passive utility; and its active utility.

Defining nature

Within the body of legislation, nature is framed culturally, as landscape, or scientifically, as its component parts of ecosystems and species. Landscapes are essentially the visual calculus of smaller-scale management practices, rather than ecological functions (McNeill, 2012). As such, they are social and cultural constructs of space, most obviously as national parks or reserves, where many human activities are excluded. This broad spatial scale is underlined by the Queen Elizabeth the Second National Trust Act 1977 equating

pollution and climate change, to name some issues. As well, terms such as sustainability, which draws from the 1987 Brundtland report (World Commission on Environment and Development, 1987), and biodiversity – given formal currency by the United Nations 1992 Rio de Janeiro Earth Summit – are now in common parlance. Accordingly, unless updated or reformed, a body of legislation accumulates over time multiple meanings of nature which frame how administrators make and implement policy choices (Davoudi, 2012). This legislation may ossify values that are inconsistent with contemporary ones if left unchanged. For example, the Forests Act 1949, with its provision for balancing production and protection of native forests by the former New Zealand Forest Service, was seen in the 1970s as becoming increasingly out of touch with contemporary values and

organisations primarily responsible for undertaking natural resource management functions, operate under four acts. In contrast, the legislation under which New Zealand's nature is managed remains largely untouched, so that today DOC administers some 27 acts. Two-thirds of the legislation DOC administers predates the department's establishment in 1987, with a third dating from the 1970s. Although some acts have been amended, their overall intents have not been changed, suggesting a range of concepts of nature in New Zealand. Accordingly, we need to consider whether the meanings of nature embedded in the legislation are consistent and still relevant. As a first step, we need to take stock of how nature is realised in New Zealand's body of law.

The remainder of this article overviews New Zealand's nature legislation. It examines legislation that addresses some

Table 1: New Zealand's nature management legislation

Act	Agency	Species Origin		Passive Utility					Active Utility				Intrinsic value	
		native	introduced	landscape/ natural features	amenity	recreation	access	enjoyment	ecological services	tourism	resource	extraction		
International														
Trade In Endangered Species Act 1989	DOC		•											•
National - general														
Marine Reserves Act 1971	DOC													
Reserves Act 1977						•	•	•						•
Queen Elizabeth the Second National Trust Act 1977	DOC			•		•								
National Parks Act 1980	DOC	•	•	•	•	•	•	•	•					•
Environment Act 1986	MfE												•	•
Conservation Act 1987	DOC	•									•		•	•
Resource Management Act 1991	MfE			•						•			•	•
Walking Access Act 2008	MPI						•	•					•	
National - biota focus														
Fisheries Act 1996	MPI	•											•	
Native Plants Protection Act 1934	DOC	•												
Wildlife Act 1953	DOC	•	•											
Wild Animal Control Act 1977	DOC		•			•							•	
Marine Mammals Protection Act 1978	DOC	•												
Biosecurity Act 1993	MPI		•											
Forests Act 1949 (1993 Amendment)	MPI	•											•	•
Game Animal Council Act 2013	DOC		•			•								•
Local (selection)														
Manapouri - Te Anau Development Act 1963	MBIE					•							•	•
Lake Wanaka Preservation Act 1973	DOC			•										
Ngai Tahu (Pounamu Vesting) Act 1997	MBIE													•
Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010	OTS			•										
Te Urewera Act 2014				•	•	•	•	•	•					•

DOC – Department of Conservation; MfE – Ministry for the Environment; MBIE – Ministry of Business, Industry and Enterprise; OTS – Office of Treaty Settlements

open space with landscape, while the RMA emphasises natural landscapes as opposed to human formed ones.

Other acts view nature scientifically, focusing on biota, the living components of these landscapes, and as such aspatially. An enduring theme in New Zealand's environmental discourse has been the country's biological uniqueness, reflecting the richness of its deep-time endemic species (Brown et al., 2015), popularly articulated in the idea of Moa's Ark, with little concern for introduced species and their ecosystems (MacLeod et al.,

2008). Accordingly, many acts distinguish between native and introduced species. None include agricultural production species; nature is mainly native and 'wild'.

The specificity of the legislation relates to origin of the organisms. Introduced biota is mostly defined at the species level: the Wildlife Act 1953 and Wild Animal Control Act 1977 have long schedules specifically identifying introduced species of animals that can be hunted. In contrast, native biota is treated generally, even though New Zealand has as many introduced as native

species, so that native biota is essentially defined as being not-introduced. Thus, in the Marine Mammals Protection Act 1978 a native marine mammal is defined simply as any mammal adapted to the marine environment, and 'all species of seal, whale, dolphin, and porpoise, and dugong and manatee' (section 2).

More recent legislation moves from individual species to aggregates of species. This attribute is defined in the RMA through a 2003 amendment: 'biological diversity means the variability among living organisms, and the

ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems' (section 2). This definition very closely matches the definition given in the 1992 United Nations Convention on Biological Diversity. It also chimes with contemporary biologists' thinking of nature as ecological systems operating at different scales simultaneously, rather than as component parts. Nature is native, but assemblages of non-native species are not.

Purpose of nature

The purpose for which nature is used also helps understand how it is perceived. The underlying presumption throughout the legislation is that at least parts of nature can be dominated by humans to achieve public utility. This presumption is

can be commercially fished as soon as they swim outside park boundaries.

Much of the earlier legislation focuses on either protecting native birds and animals from being killed by people, or facilitating killing of introduced ones that threaten natives. The National Parks Act 1980 seeks to preserve native plants and animals within the parks, but introduced plants and animals are as far as possible to be 'exterminated'. The Wild Animal Control Act 1977 seeks generally to control introduced animals – goats, deer and other specified animals – and to 'eradicate' them locally where necessary and practicable.

Nature for passive use

The legislation also reflects a view of nature as something that people, whether as recreationists, conservators or

unchanged since 1952: 'for the benefit, use, and enjoyment of the public' (ibid.). The value of nature for recreation is clearly spelt out in the legislation: the Conservation Act 1987 requires DOC to 'foster the use of natural and historic resources for recreation' (section 6(e)). Public access to nature for these passive uses is also legislated for. The National Parks Act 1980 allows 'freedom of entry and access to the parks, so that they may receive in full measure the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features' (section 4(e)). Similarly, the Reserves Act 1977 provides for preserving public access along coastlines, riversides and lakesides. However, access to the outdoors through privately-owned (productive) nature has been a long-standing concern, addressed by the New Zealand Walkways Acts of 1975 and 1990, both repealed, and the Walking Access Act 2008.

Environment for active use

Legislation also provides for people to extract utility from nature. The Wildlife Act 1953, Wild Animals Control Act 1977 and the Game Animal Council Act 2013 all regulate aspects of recreational and commercial hunting and animal recovery of (mostly) introduced species. They combine control of introduced species for native environment protection with recreational and commercial game hunting.

The legislation drafted in the 1980s and 1990s takes a more utilitarian turn by explicitly framing nature as a resource, a storehouse of assets and functions for use at will for human benefit. This is most clearly articulated in the long and short titles of the RMA: the Resource Management Act is '[a]n Act to restate and reform the law relating to the use of land, air, and water'. Further, it defines natural resources to include 'all forms of plants and animals (whether native to New Zealand or introduced)'. This meaning is also embedded in the Fisheries Act 1996, which provides 'for the utilisation of fisheries resources'. Both the RMA and Fisheries Act make clear that this utilisation is for people and communities'

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expressed in the language of domination employed: to manage, preserve, conserve or control. This intervention is either to protect native nature or to utilise nature for human benefit, viewing nature as multi-purpose.

Nature protection

The purpose of much of the legislation reinforces the perception that New Zealand's nature consists of its unique landscapes and native biodiversity, and that this nature is vulnerable and needing protection, especially from exotic biota. The emphasis is very much on preserving (native) nature in perpetuity in its natural state (National Parks Act 1980, section 4). Similarly, the Wildlife Act 1953 provides absolute protection to wild animals, except for (introduced) deer, goats, tahr and pigs. Such protection can be conditional, however. For example, fish in marine national parks are (largely) protected, but

scientists, experience passively as visitors, rather than being part of. Landscapes are valued for the aesthetic appeal of their scenery or features, but also for activities undertaken within them. Significantly, they are not seen as part of people's lives, but somewhere else to be viewed, or visited for various purposes. The Reserves Act 1977 situates nature as a place of scenery and landscapes to which people go for enjoyment and recreation, as well as wildlife protection and scientific study. This theme is also found in the national parks legislation, which defines national parks as 'areas of New Zealand that contain scenery of such distinctive quality, ecological systems, or natural features so beautiful, unique, or scientifically important that their preservation is in the national interest' (National Parks Act 1980, section 4).

The reasons for national parks and for public access to them remain substantially

‘social, economic, and cultural well-being’. The Conservation Act 1987 suggests that even intrinsic values are subordinate to and ultimately valued within utilitarian value systems, defining conservation as: ‘the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values’ (section 2).

The 1990s legislation also specifies how these resources are to be used. Rather than being allowed to be depleted, resources are to be utilised sustainably. For example, the purpose of the RMA is ‘to promote the sustainable management of natural and physical resources’ (section 5), while the Forests Amendment Act 1993 seeks the ‘sustainable forest management of indigenous forest land’ (section 67B). The RMA provides an extensive definition of sustainable management which recognises the needs of future generations, life-supporting capacity of environmental components and managing adverse effects of resource use (section 5). More simply, the Fisheries Act 1996 defines ‘ensuring sustainability’ as ‘maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations’ (section 2).

However, some legislation embeds tension between protection and utility. For example, the blanket extermination approach to introduced species in national parks is compromised by the privileged status given to introduced trout and salmon in the legislation despite the knowledge that these have significant and ongoing adverse impacts on native freshwater communities (Chadderton, 2001). The RMA requires those exercising functions and powers under the act to have particular regard both to the ‘intrinsic values of ecosystems’ and to ‘the protection of the habitat of trout and salmon’ (section 7). Similarly, the Conservation Act requires DOC ‘to preserve so far as is practicable all indigenous freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats’ (section 6(ab)), while the Manapouri–Te Anau Development Act 1963 explicitly requires consideration to ‘minimise any adverse effects on the trout fishery’ in these lakes (section 5(b)).

The West Coast Wind-blown Timber (Conservation Lands) Act 2014 similarly places utility above ecological function. In this case, the legislation allows for the removal of native trees blown over by Cyclone Ita from conservation land (other than specified areas of high ecological value) so they can be used for manufacturing. Ecologically, the wind-blown trees can be seen as providing habitat for many indigenous species and completing nutrient cycling, so the trees should be left where they fell, quite apart from any concerns about wider policy implications of timber extraction on conservation land.

‘intrinsic values’ in relation to ecosystems as ‘those aspects of ecosystems and their constituent parts which have value in their own right’. The Te Urewera Act 2014 states that it is, *inter alia*, Te Urewera’s ‘intrinsic worth’ that is being protected.

Recent enactments addressing Treaty of Waitangi settlements between the Crown and iwi reify older conceptualisations of ‘nature’ that predate the 1840 treaty. They formalise a Māori world view of nature that melds human and natural worlds. Thus, schedule 1 of the Waikato–Tainui Raupatu Claims (Waikato River) Settlement Act 2010 states: ‘to Waikato–Tainui, the Waikato River is a tupuna (ancestor) which has mana (prestige)

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Nature as metaphysical

The legislation also addresses the metaphysical aspects of nature. Western discourses have focused on whether nature has intrinsic values. Environmental debate in the 1970s and 1980s pitted ecocentric and anthropocentric views of the environment against each other (Eckersley, 1992). Part of the ecocentric position was that the environment has an intrinsic value incommensurate with utilitarian values. However, recent New Zealand enactments have sought to formalise Māori world views, which meld physical, spiritual and social elements of nature within the European legal system.

Several acts seek to recognise nature as having intrinsic values: that is, values independent of human socio-economic systems. The National Parks Act 1980 seeks to preserve national parks for their ‘intrinsic value’, among other reasons. The Conservation Act 1987 defines conservation as the ‘preservation and protection of natural and historic resources for maintaining their intrinsic values’ (section 2). The RMA defines

and in turn represents the mana and mauri (life force) of the tribe’. The most far-ranging paradigm change has been to ascribe rights to nature. In returning the former Urewera National Park to Tūhoe, the Te Urewera Act 2014 declares Te Urewera to be a legal entity, with all the rights, powers, duties and liabilities of a legal person (to be exercised and performed on its behalf by a board) (section 11).

Discussion and conclusion

New Zealand’s body of nature management legislation as described above can be briefly summarised as providing a means for the state to preserve attributes of space, protect native biota or kill introduced species. However, the array of long titles, purpose statements and contents of the individual acts making up this body suggest a legal palimpsest of meanings of nature. The different ‘nature’ laws all suppose that aspects of our indigenous nature, whether species, ecosystems or landscapes, need some sort of protection from or mediation of human activity

to obtain public good derived from its continued existence. Their existence and purpose reify a range of different discourses of scope, focus, scale and how nature is to be managed.

However, underlying tensions exist within the body of legislation, from the separation of natural and productive nature. This tension is expressed most obviously in the placing of the former in public ownership and through excluding people and their activities. Thus, the national parks and reserves legislation demarcates and severely limits activities within particular landscapes dominated by native nature. In contrast, productive agricultural and plantation forest lands dominated by introduced species are on

the purpose of preserving in perpetuity as national parks, *for their intrinsic worth* and for the benefit, use, and enjoyment of the public, areas of New Zealand that contain scenery of such distinctive quality, *ecological systems*, or natural features so beautiful, unique, *or scientifically important* that their preservation is in the national interest. (National Parks Act 1980, section 4(1); 1980 additions to National Parks Act 1952, section 3(1) in italics.)

The notable differences between the two acts are the addition of intrinsic worth and ecological and scientific values in 1980. Significantly, the Te Urewera Act

departments and in their advice to their ministers as they seek to manage conflicting goals. This is not new: the strong argument for the 1980s environmental reforms was to remove multiple functions within the former Department of Lands and Survey, Ministry of Works and Development and Forest Service, among others. More recent legislation establishes hierarchies to guide implementation. The National Parks Act 1980 sets a hierarchy in managing multiple uses, providing for public entry and access subject to preservation of native plants and animals and welfare in general (section 4(2)(e)). The Conservation Act 1987 gives DOC a suite of functions: first, to conserve and advocate for natural and historic resources, preserve all indigenous freshwater fisheries, and protect recreational freshwater fisheries and their habitats. It is also to foster the use of these resources for recreation and to allow their use for tourism (section 6). The danger comes if these hierarchies are subordinated to other policy goals.

However, the wider result of the suite of legislation is that DOC is forced to internalise trade-offs between its different legislative goals. Though in a less obvious way, DOC is in a similar position to the former Forest Service, which was required to achieve 'balanced use' in the 1970s under the Forests Act 1949. This potential clash of objectives is less stark than the other anomaly, of different government departments having primary responsibilities for New Zealand's 'nature', and it can be expected that these departments are influenced by their primary legislation foci. In some cases this is perhaps obvious: with the Ministry for Primary Industries, for example, which manages fisheries and native forestry for utilisation and production. But it may be more subtle regarding biodiversity, where regional councils have responsibilities for maintaining indigenous biodiversity under a legislative regime which explicitly regards 'nature' as a resource.

DOC expressed a utilitarian view of the nature it manages in its ministerial briefing. Whether this view is supported by the legislation it operates under is another matter. Critically, very little in the legislation supports privileging this view

The multiple meanings of nature embedded in the legislation potentially set up conflict within government departments and in their advice to their ministers as they seek to manage conflicting goals.

private land and are largely managed through the RMA. The result is a spatial manifestation of the native/introduced biota dialectic that frames native nature as a zoo that is visited, while introduced nature is harnessed as a means of production where people live and work.

Some changes in perception of nature and management over time are apparent. Older acts emphasise the qualitative and passive value of nature. Legislation passed since the 1980s, on the other hand, frames nature as a 'resource', together with its sustainable management. The most recent body of legislation introduces the metaphysical, a trend likely to continue as further Treaty of Waitangi settlements are achieved: for example, with the Whanganui River tribes. Nevertheless, concepts can endure. For example, the purpose of national parks given in the National Parks Act 1952 was imported substantially unchanged into the National Parks Act 1980:

2014, using many of the same words, underlines the currency of these concepts over 60 years later.

Scale of focus also changes with time. Earlier legislation tended to focus on species, while the 1970s legislation recognises ecosystems – the natural systems within which individual populations of species exist – indicating a change of comprehension about how nature operates. Scale has changed again with the emergence of biodiversity as a discourse in the early 1990s, popularised at the 1992 Rio Earth Summit. As a term, it first appeared in New Zealand legislation in a 2001 amendment to the Fisheries Act 1996, and then in a 2004 amendment to the Hazardous Substances and New Organisms Act 1996, both drawing on United Nations conventions that used that term.

The multiple meanings of nature embedded in the legislation potentially set up conflict within government

over others. Rather, DOC needs to manage a range of management objectives. And aligning practice to a particular theory or world view may prove a double-edged sword: DOC, by justifying its work on utilitarian ecosystem service provision grounds, also exposes itself to critiques of that theory (e.g. McCauley, 2006; Ridder, 2008). Similarly, playing the biodiversity card is not without risk. For example, kakāpō, once New Zealand's third most common bird (Gibbs, 2006), and now represented by some 130 individuals confined to three remote Fiordland islands, clearly have no impact on New Zealand's broader ecosystem functioning. From a population dynamics perspective, triage may be more appropriate, though publicly rejected (Clements et al., 2011; Torrie, 2011).

Whether these meanings are still appropriate can also be questioned. The dominant view of nature as resource, whether or not to be used sustainably, has not halted the degradation of much of New Zealand's natural environment

over the 20 years this view has been in vogue (Ministry for the Environment and Statistics New Zealand, 2015). More broadly again, the legislation, with its focus of conservation and preservation, implies a view of nature that is or should be in equilibrium, preferably devoid of introduced biota. And by protecting landscapes, we seek to freeze time, resisting change. Perhaps, as Stott (1998) provocatively argues, we need to recognise the ecological fallacy of this approach. The native/introduced species dialectic was challenged in the early 20th century, and New Zealand may be better seen functionally as an uncontrolled experiment (Holland, 2000), where landscapes consist of ecological systems of productive and protected land with mixes of species (MacLeod et al., 2008). This would require us to accept that New Zealand and its natures are dynamic; that many native species are already functionally extinct, the differentiation between natives and exotics less clear than we would like to believe, and that

greater forces of climate change on nature seem beyond human control. The reality is that landscapes are changing as land uses change.

Against this background it is suggested that we need to consider whether our palimpsest of nature management law is still appropriate for the 21st century. It would be tempting for an activist government to implement a nature law reform, similar to the 1980s resource management law reform that led to the RMA. Rolling all the related and sometimes overlapping legislation into one omnibus law would provide administrative neatness and ensure consistency. On the other hand, it would project a particular public good that may prove less than durable. Regardless, the palimpsest of laws with their differing views of nature suggests consideration of whether their mixed conception of New Zealand's nature is appropriate for the 21st century and calls for a wider discussion about how we want to treat it.

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