



Full citation: Star, Paul. "Native Forest and the Rise of Preservation in New

Zealand (1903–1913)." *Environment and History* 8, no. 3 (August 2002): 275–94. http://www.environmentandsociety.org/node/3127.

Rights:

All rights reserved. © The White Horse Press 2002. Except for the quotation of short passages for the purpose of criticism or review, no part of this article may be reprinted or reproduced or utilised in any form or by any electronic, mechanical or other means, including photocopying or recording, or in any information storage or retrieval system, without permission from the publishers. For further information please see http://www.whpress.co.uk.

Native Forest and the Rise of Preservation in New Zealand (1903–1913)

PAUL STAR

History Department, University of Otago. Mailing address: 246 Harington Point Road RD2, Dunedin, New Zealand Email: starmula@es.co.nz

ABSTRACT

This paper analyses the turning-point in attitudes to the most distinctive feature of one nation's indigenous environment. Some conservation of New Zealand's native forest began long before the Scenery Preservation Act of 1903, but until then the primary motivation was economic. After 1903, aesthetics and national identity became recognised as important additional factors. In 1913, the Forestry Commission found that managed native forest was incommensurate with New Zealand's long-term timber requirements. This left the way clear for preservation for primarily non-economic reasons to become, increasingly, the hallmark of New Zealand's approach to native forest.

KEY WORDS

New Zealand, forest, reserves, conservation, preservation

INTRODUCTION

The conservation by European settlers of New Zealand's native forests was founded on the assumption of their continuing utility, both as a source of timber and as a safeguard against desiccation of the environment. With the twentieth century, further reasons for forest protection became clear. These often had more to do with beauty and sentiment than with economics, and they paved the way for recognition of forest (often referred to as 'bush') as a major component in the country's identity. First, the *Scenery Preservation Act* of 1903 created a new

mechanism to iconise those indigenous remnants rather than sacrifice them to settlement and economic gain. Ten years later, a Forestry Commission report convincingly argued that most native forest could have no long-term regenerative future as part of the country's timber source. Thereafter, New Zealand seemed bound upon a course that increasingly dismissed the use-oriented conservation of native forests, seeking instead their complete preservation.

Conservation, in the meaning of the word used here, encourages 'wise use' or 'sustainable management' of protected indigenous ecosystems. Preservation, on the contrary, implies the protection of indigenous ecosystems from any direct utilisation, whether felling individual trees or 'harvesting' limited numbers of native birds or animals. By the end of the twentieth century, emphasis on preservation had become pronounced in New Zealand – perhaps more so than in any other country. By looking at what New Zealanders thought about their forests at the *beginning* of the twentieth century, we can better understand how this situation arose.

REMOVAL OF NATIVE FOREST

In Western tradition, civilisation's advance is antipathetic to the presence of forest. In New Zealand in 1907, this notion was articulated by Elsdon Best, a European scholar of Maori culture:

The people settling in a forest country must destroy the forest or it will conquer them. The forest is conservative, repressive, making not for culture or advancement. None of the higher types of civilisation of antiquity originated in forest lands. Primitive man remains primitive in sylvan solitudes. Some day a civilised tribe, from open lands, happens along, and hews down that forest. Then the children of Tane [god of the forests], human and arboreal, alike disappear, and the place knows them never again.¹

Tucked away in the Southern Pacific, distant even from Australia and other islands, New Zealand was not reached by Best's 'primitive man'—the Polynesian ancestors of the Maori—until about a thousand years ago. English, Scottish and Irish settlement began in earnest only in 1840. The 'European' population was approaching 800,000 by 1901, while the Maori population numbered less than 50,000.

The total area of New Zealand is over 27 million hectares. At this time, thanks to the efforts of the 'civilised tribe' from Britain, 14.5 million of these hectares were officially 'in occupation', answering to the needs of Western agriculture or pastoralism. They produced crops, or else sown or native grasses for consumption by sheep (over twenty million of them) and other stock. The area of

occupation was still rapidly increasing. By 1910–11 it extended over 16.5 million hectares – nearly two thirds of the total area.

Turning New Zealand's land to production was a fundamental objective of European settlement. It was considered a measure of progress. But correspondingly, as occupation increased, the area of unoccupied land, with its indigenous vegetation cover, decreased. The area in forest decreased from 9 million hectares in 1886 to less than 7 million hectares in 1909.

Of this area, 2.8 million hectares was in private and native lands. Government found it difficult to legislate over this portion, though compulsory purchase was possible under the terms of the *Scenery Preservation Amendment Act* or the *Public Works Act*. A further 0.8 million hectares was 'permanent forest', including national parks, scenery and climatic reserves. The land most open to alienation was the 3.2 million hectares in Crown Forest, including Crown land, state forest, and forest reserves. The *Bush and Swamp Crown Lands Settlement Bill* of 1903 reflected the still dominant attitude to such land. 'What is the use of all these millions of acres', one politician demanded, 'unless something is done to make them produce wealth, to make the grass grow, so as to carry sheep and cattle?' The Bill encouraged settlers to 'improve' such land by foregoing rates for the first four years on bush lands (as long as burning and clearing took place), for three years on swamp, and for two years on scrub. William Johns, a farmer of fifty years experience, noted sadly that 'many a settler cuts down every tree on his holding, and looks on trees as enemies'.²

Some claimed it was 'no use trying to conserve the colonial timber' since, 'like coal in the earth – it was there to be used'. Much of it had indeed proved useful. Kauri (*Agathis australis*) and rimu (*Dacrydium cupressinum*) were excellent building timbers, while kahikatea (*Dacrycarpus dacrydioides*) was the ideal wood for butter boxes. In 1900, timber made up 1.8 per cent of all exports, contributing about a quarter of a million pounds to the economy. Though frozen meat (16 per cent) and wool (36 per cent) had attained much greater significance, timber remained a notable item of trade. Nevertheless, the urgency which settlers felt to convert land beneath the forest to agriculture resulted in much wood being burnt or wasted. It was often simply uneconomic to transport timber from newly-settled areas to its potential market.

Some continued to believe that the removal of all bush was inevitable. C. H. Mills, the Commissioner of Trade and Customs, felt that 'as settlement progresses it is simply impossible to keep any small sections of it [the bush] – sawmilling and settlement must go hand in hand'.⁴ Bush was said to harbour noxious weeds, rabbits, and small birds which damaged fruit; it was also considered a fire risk. As an extension of this argument, since they were bound to be destroyed by fire, the creation of scenic reserves was wasted effort and their existence 'a menace to the settlers'.⁵

PROTECTION OF NATIVE FOREST

The process of transformation, however, had reached the point at which native forest in some areas appeared decidedly scarce. Insofar as any asset, when it becomes scarce, increases in value, it is not surprising that attempts to define and protect the more precious pieces of the indigenous remnant took off precisely when tremendous energy was expended in removing whatever was not protected. Against the background of an 'urge to clear the bush' there grew the urge to save it.⁶

Those who sought protection of the bush claimed they did 'nothing in the direction of blocking ... settlement' but that one 'had to look after something more than the merely commercial side of life'. In fact, since the early days of European settlement, some reservation of New Zealand's forests had occurred, mostly with a view to their later exploitation. In the 1890s, three further kinds of reservation emerged.

Firstly, there were large national parks, always in areas remote from settlement and therefore not in direct conflict with it. The creation in 1894 of Tongariro National Park, centred on mountain peaks above the tree-line, has been widely commented on, and linked to a national park movement which began in the United States. This kind of reservation continued: In 1902, for instance, a prominent Otago politician, Thomas Mackenzie, successfully lobbied government to make a 'public park' in Fiordland.⁸

Secondly, island reserves as sanctuaries for native birds were created from 1892 onwards, at Resolution Island in Dusky Sound, Little Barrier Island, and then Kapiti. This was a specifically New Zealand response to growing international awareness that native fauna and flora needed protection. Here again, though, reservation occurred in New Zealand's extremities, where agriculture and pastoralism were not a major concern.

A simultaneous movement sought to reserve the remaining smaller areas of bush close to the very areas where settlement already existed or was planned. While smaller-scale land reservation occurred earlier, notably through the *Land Act* of 1892, only the *Scenery Preservation Act* of 1903 was specifically designed both to protect areas from settlement and to advance goals other than the satisfaction of settlers' material needs. The first reserves under the terms of the Act – a representative sample – were Waitomo caves in King Country, Nuhaka caves in Hawke's Bay, Bream Head Mountain and Motukaraka Island in Auckland province, Whangamoa Saddle in Taranaki, and Flagstaff Hill in Otago.¹⁰

By 1907 there were 1.16 million hectares of 'scenic reserve' – a large area, but the figure included 1.12 million hectares in national park, of which the bulk was in Fiordland. A further 31,000 hectares of the total were scenic reserves allocated under the terms of the 1892 Act and kindred legislation. Only 11,000 hectares, or 0.0004 per cent of the country's area, had been made into scenic

reserve under the terms of the 1903 Act up to that point. Nevertheless, the Department of Lands felt these figures showed that 'the scenic attractions of New Zealand have not been allowed to be destroyed (except in some slight degree, almost inevitable in the onward rush of trade and population), but will be preserved intact for all time as the patrimony of the people'.¹¹

New Zealanders' concern about their native forests mirrored, often knowingly, concurrent events in North America and Australia. To give one example: When Harry Ell, the Christchurch parliamentarian most associated with forest protection, raised the issue in the supply debate of 1905, he drew attention to President Roosevelt's recent address to the US Congress on the same theme. Expressions of national identity, also, were part of an international trend. Nevertheless, protection also reflected genuine *local* concern, and national identity, to be valuable, *had* to have a local flavour. It is the New Zealand context, more than the international pattern, which I seek to explain.

ECONOMIC REASONS FOR PROTECTING NATIVE FOREST

What were the reasons, both old and new, for protecting native forest, whether in scenic or other kinds of reserves? To begin with, forest reserves had been justified simply as wood lots, on the British model, to meet the continuing needs of settlers for firewood, timber, or grazing. This perspective became eroded over time, as knowledge grew of the different nature of New Zealand bush and British woodland. But there was also a growing awareness that native timber was being used up at an alarming rate. Native forest, even though it could not be treated like British woodland, could still retain a place in New Zealand's development. A strong case remained for reservation of the bush as a valuable asset, a future source of timber.

In 1908, when he summarised the reasons for forest conservation, the Government Forester H. J. Matthews made much of this 'industrial' motive, the need to produce 'enough millable timber to meet the continuous and growing requirements of the building and allied trades'. He also provided the 'climatic' reason, familiar since at least the 1860s, that removal of too much forest would 'injuriously affect the annual rainfall in volume and extent, and reduce the present water-holding power of the land'. As a third reason, forest limited 'soil-denudation'.¹³

The case was heard not just before Parliament but by the wider public. The *School Journal* contained lessons on 'forest denudation' which might 'help forward ... the celebration of Arbor Day'. It was the practice of the Legislative Council to refrain from sitting on Arbor Day, 'to impress upon the rising generation the great desirability of tree-planting, [and] forest conservation'. By 1913, the Day's planting programme had become an attempt 'to save the country from the shame of its own nakedness'. 14

The emphasis on Arbor Day, however, hints at the fragile nature of the argument for native forest, since if the remaining area of bush was insufficient, the need for timber or for climate control might equally be answered by the planting of new trees – preferably fast-growing exotics. As these grew up, the bush could still come down. Matthews only considered it 'imperative to restrict the present indiscriminate sawmilling of all available forest to such moderate extent as will insure their gradual disappearance synchronous with the development and growth of the State plantations, so that as the one fails the other may take its place'. ¹⁵

The State Nurseries and Plantation Branch of the Department of Lands, established in 1896 under Matthews, was actively involved in afforestation to increase New Zealand's timber supply. By 1907 they had planted over 15 million trees within an area of about 2,700 hectares. The vast majority were exotics, though it was by no means clear at this time that *Pinus radiata*, a Californian species, would dominate the afforestation programme. Native trees were still being planted in modest numbers. Only 180,000 totara (*Podocarpus totara*) had been planted, and 8,000 kowhai (*Sophora tetraptera*), but this did not imply a comparable dismissal of them as a future timber source. On the contrary, it demonstrated a belief that maintenance of the native timber supply was more a matter for nature than for humans. The forests would regenerate by themselves. ¹⁶

The 1911 report on state afforestation marked a distinct change of attitude, by emphasising reasons against indigenous reforestation. Native trees, it said, took 'an inordinate length of time to grow' and you could 'raise on average three to five crops of larch or pine during the same time'. Furthermore, 'being surface-rooters, their adaptation for general afforestation in open lands is practically prohibited through the damaging effects of exposure to sun and wind'. Nevertheless, the most compelling factor remained that 'some of the most fertile and productive soil and country in the Dominion was to be found in those very forests that contained the most valuable timber'. This rendered it 'as useless and as difficult a matter to preserve these magnificent forests ... as it would have been to have prohibited the spread of settlement and the onward march of civilization'. 17

THE 1913 FORESTRY COMMISSION AND NATIVE FOREST

These statements prefigured others in the more wide-ranging Forestry Commission report of 1913. For us, the interest again lies in the attitudes the commissioners noted to native forest at the time, and in their conclusions on its value. One of the commissioners, the botanist Leonard Cockayne, had long since declared the decrease of bush a misfortune, but he also considered it an essential and often justifiable component of settlement.

New Zealand in 1913 was concerned with development and population increase, impressed both by extrapolations into the future which suggested an incipient timber famine and by the evidence of a rival nation (Germany) outdistancing Britain and her Empire in the application of science to industry – including the timber industry. The commissioners were therefore powerfully attracted to trees that would yield timber rapidly. They noted a widespread belief (not nearly so evident 50 years before) that native trees could be managed by forestry. But they then gave particular attention to a 40-year old plantation of both exotics and natives in Thames, near Auckland. These specimens served 'to illustrate the rate of growth of some exotic trees in comparison with our own native forest-trees' and revealed 'the utter absurdity of suggesting such a tree as the totara for afforestation purposes'. 19

It was evident that kauri, the most highly valued of New Zealand's timbers, would soon all be spent. At much the same time as the Forestry Commission reported, botanist Thomas Cheeseman published his finding that 'although the kauri is not so excessively slow in growth as has been supposed, it is much slower than most trees of economic value' and would not 'offer any hope of monetary return'.²⁰

But the kauri of North Island had another kind of value, already acknowledged in 1902 when Harry Ell asked the Minister of Lands for a kauri reserve. Cockayne's botanical survey of Waipoua in Northland (1908) pointed out that kauri forest was both the grandest scenically and most interesting botanically of native forest communities. For him, settlement took increasingly *less* precedence over reservation as the commodity approached extinction, and a reserve was most justifiable where the forest was most nearly primeval – he considered Waipoua 'to all intents and purposes a virgin formation' – and where its features were uniquely New Zealand in character. He found that, at Waipoua, 'out of a total of 127 forest plants ... no fewer than 120 are endemic'.²¹

It is a measure of the conflicting forces at work that the Forestry Commission of 1913, including Cockayne, then recommended the removal of interim reservation of Waipoua State Forest, finding the area 'altogether too large for a permanent reserve'. A smaller 'national kauri park' was proposed, but the majority of the forest could be yielded up, since 'no forest land, except it be required for the special purposes of a climatic or a scenic reserve, and which is suitable for farmland, should be permitted to remain under forest if it can be occupied and resided upon in reasonably limited areas'. Similarly, the Commission noted that 'the soil of the white-pine [kahikatea] swamps, when drained and the trees removed, forms the richest of agricultural land, which when grassed is of extreme value for dairy farms'. Therefore, 'their value in this regard is a strong plea in favour of the removal of the trees forthwith'.²²

Native trees grew at the wrong pace and in the wrong place. In New Zealand, the commissioners stated, and in contrast to the situation elsewhere, 'the natural

forests belong, with perhaps one exception, to a class which cannot regenerate sufficiently quickly to allow them to be kept as permanent forests yielding a succession of crops'. ²³ Such an incisive and influential dismissal of the forestry potential of indigenous species led to massive plantation of exotics (radiata pine by then, in preference to larch) rather than of natives. ²⁴

Two caveats must be noted. Firstly, the Commission still considered there might be a future for production from the West Coast beech (*Nothofagus*) forests of the South Island, since they 'are the only ones amongst those indigenous to New Zealand which may regenerate rapidly enough to warrant their permanent retention'. Secondly, the Commission saw a continuing function for native forest in climate control, and recommended extensive reservation for this reason. It proposed new climatic reserves of 0.7 million hectares, or about 2.7 per cent of the total area of New Zealand. These forests would limit both drought and flood in the agricultural land below them, and should be retained irrespective of any commercial, scenic or tourist value.

FURTHER REASONS FOR PROTECTING NATIVE FOREST

In the year 2000 there were still over 6.2 million hectares – or 23 per cent of New Zealand's total area – in native forest. If timber production and climate control were the only considerations, far less forest would have been retained. But there were other reasons for keeping it, which had gained increasing potency in the decade or two *before* the Forest Commission report.

Firstly, bush was found beautiful. Many European settlers had always felt as much, ²⁶ but beauty was only acknowledged as an argument for protection as the area in forest diminished. A college lecturer wrote in 1909 of 'sensitive and aesthetically-minded folk [who] have thought of the bush as a highly picturesque asset among our manifold scenic attractions, and ... deplored its disappearance chiefly because it means the destruction of national beauty, which can never be restored'. Many of the new generation also viewed native forest in this light. One Otago girl, for instance, who visited the bush and found rata (*Metrosideros umbellata*) 'climbing up tree-trunks and fern-trees', considered it 'such a pity to spoil its natural beauty, for it looked far prettier growing there than when we hung it up to decorate the church for Harvest Festival'. Rudyard Kipling, after visiting New Zealand in 1891, wrote that 'it is no easy work to weave the souls of men into their surroundings'. Two decades later, Europeans and the New Zealand bush were worked into a common weft. ²⁷

Concomitant with perception of the forest's beauty, its absence could seem ugly. While the bush had once been considered a wasteland, some now complained that sawmillers 'left the bush country a howling waste' and that the formerly forested lands between Wellington and Wairarapa had become a scene

of 'naked, ugly barrenness'. In Eastern Bush in Southland as elsewhere, 'areas of sceneryland' had become 'hideous masses of blackened stumps'.²⁸

A sense of the beauty of the forest was indicated not just by its preservation, but also by the planting of natives in public and private gardens. Phillips Turner, the Inspector of Scenic Reserves, wrote in 1912 of these 'gratifying indications' of a 'growing appreciation'. A short-lived Society for the Preservation and Growth of New Zealand Flora was founded in Marton in 1913, evidently on an American model.²⁹

The Milford Track, much of it through native forest, was first pronounced the 'finest walk in the world' in 1908. ³⁰ Prof. Albert Heim of Zurich, touring in 1901, wrote of the 'extraordinary beauty' of New Zealand's bush. Opinions of this kind were well publicised by Thomas Donne, who was Superintendent of the Department of Tourist and Health Resorts from its inception in that year. He reasoned that, because it was beautiful, native forest would create income by attracting tourists. This became an increasingly significant argument for preservation, initially applied by Donne to forest along the route of the Main Trunk line from Wellington to Auckland. He said it would 'afford a great attraction to travellers ... whereas miles of burnt and blackened logs would prove a weariness to the spirit'. ³¹

Between 1907 and 1909, the Government commissioned Leonard Cockayne to make botanical surveys of several key areas being considered for protection.³² In the introductions to his reports, Cockayne's reasoning extended beyond any appeal to economics or beauty when he maintained that some reserves should be scientific rather than scenic, with tourism excluded. Kapiti Island near Wellington, for instance, was 'no place on which to picnic'.³³

Cockayne measured the worth of native forest – the principal pre-European environment – on the extent to which it had not been altered, while demonstrating that the progress of European settlement directly conflicted with the retention of the primeval environment. His 'oecological' survey of the Chatham Islands of 1901 portrayed 'a most remarkable vegetation, doomed in its primeval condition to extinction', for, even as he wrote, 'the previously inaccessible forest lying under the precipitous cliffs of the south coast has been opened up to stock'. This implied a need for immediate action, not just on the Chathams but in New Zealand as a whole.³⁴

Cockayne also disproved the widely-held theory of displacement. Exotic species, he wrote, has no intrinsic superiority over indigenous species. Rather, the key factor was the entire smorgasbord of human-induced activity, and 'introduced plants spread especially where the indigenous vegetation has been more or less disturbed'.³⁵ This meant that native forest protection could be successful, since it was not biologically destined to disappear, but its survival depended on protection both from people and their stock.

The logical climax to Cockayne's reasoning appeared with his survey of Tongariro (1908), when he maintained that the operative factors in creating scenic value were botanical:

Scenery ... does not depend merely upon geological or geographical characteristics. Were this the case, a monotonous uniformity would distinguish the whole earth. But such is not the case; each region, on the contrary, has its own peculiarities, these depending not on the contour of mountain or valley, but upon the plant covering of the place in question. Therefore the more special the vegetation the more distinctive the scenery. And nowhere does this dictum carry more weight than in New Zealand, where the vegetation is unique. ³⁶

He used this argument – successfully – to justify the extension of Tongariro National Park into forested areas at lower altitude.

Here was scientific validation for the feeling that the bush, not the mountains, made New Zealand special. European settlers only developed this idea as they became less European. When the premier, Richard Seddon, introduced the *Scenery Preservation Bill* in 1903 he argued that already New Zealand 'had in Mount Cook, Mount Egmont, and our various lakes and rivers wonderful natural scenery; but more than that was needed'. He reasoned that 'the beautiful bush scenery ... gave these places their most potent attractions'.³⁷ Protection therefore should extend beyond the mountain peaks and the expanses of water, whose preservation had been more in line with European perceptions of beauty.

Seddon remarked that 'the last time I went through the Buller Gorge and saw the destruction of timber that has taken place ... I realised that one must not trust to providence altogether in these matters'. This directly paralleled the personal experience of the destruction of South Island bush by an earlier prime minister, Julius Vogel, which led him to champion the *New Zealand Forests Bill* of 1874. But where, at that time, the appeal was primarily to the conservation of forest for its timber potential, in 1903 the main arguments were, specifically, sentiment and the beauty of the bush. In a magisterial put-down of a parliamentarian who opposed expenditure on scenery preservation, Seddon damned him as 'unsentimental' and with 'no aspirations beyond that of a milk-pail'.³⁸

A sense of heritage grew out of the awareness of what had been lost. For many, this loss had a dual aspect, for not only had the bush been removed in the course of close settlement but also settlers, through increasing urbanisation, became physically removed from remaining bush. 'Re-creation' became an additional reason for forest. An indifferent poet, E. L. Eyre, struggled to express his feelings for 'the deep forest aisles', which contrasted with those he had for Auckland, where he worked 'in an office, dark with dust ... and round me hear the sounds of lust'. Mirroring European and American disquiet at the consequences of urbanisation and civilisation, Eyre glorified the New Zealand bush, and saw visits to it as a mental health exercise to fortify him for life in the city.³⁹

NATIVE FOREST AND NATIONAL IDENTITY

Thomas Donne observed in 1903 that 'bush lands have been sold off for very small sums, and valuable timber has been wasted in a manner which is absolutely a crime against the nation'. While part of Donne's concern was the wastage of timber, it is clear that he and many others had also begun to associate native forest with New Zealand's identity. It was in this more emotional sense that its complete destruction would be a crime. W. H. Field gave an early nationalistic slant to preservation, maintaining that 'trees planted in the colony cannot have the same interest, particularly to New-Zealanders, as our native forests'. Another parliamentarian, Charles Bowen observed that 'the New Zealand forest looks best when no foreign element intrudes', while 'European and American trees that are very beautiful in themselves do not always look well among those of New Zealand'.

Upon the creation of the Australian federation in 1901 (which it declined to join), New Zealand made a conscious decision to stand alone as a nation. In 1907 it gained dominion status as a self-governing colony within the British Empire. Suggestions that New Zealanders should be 'more patriotic' than to destroy reserved bush should be placed within this context. The new feeling was summed up in 1913, when Leonard Cockayne asked Harry Ell, whether areas of rare native flora should be 'fenced off and declared sacred'. Ell assured him they should, declaring that 'the time will come when people will not smile at these proposals, but a truly national sentiment in regard to them will be evoked'. Cockayne's own promotion of floral sanctuaries had an almost religious aspect to it. These reserves should be 'kept sacred' and 'religiously guarded'.⁴²

Cockayne increasingly aligned native flora and fauna with national identity. Already in his reports on Tongariro he called 'the vegetation of these various national parks ... a priceless possession of the people'. He claimed that 'these great open-air museums – collections which surely rival those stored up in our cities' fulfilled 'distinctly a national want'. They would 'help to arouse an interest in our unique plant-life and assist also in building up a popular sentiment towards its protection'. These remarks developed into statements clearly linking native flora and nationalism, which he made in the 1920s. 43

THE RISE OF PRESERVATION

The new reasons for forest and scenic reserves concerned tourism, national significance, beauty, sentiment, science, and climate. These are the factors we see crowding in during the 1900s. The writer Edith Searle Grossman demonstrated an awareness of the change in reasoning as it occurred, describing in 1901 a 'process of evolution' through which 'New Zealand's yet undeveloped

properties' would come to be recognised as 'more sacred treasures than its goldmines or its wool'.⁴⁴ Crucially, these new rationales required that considerable areas of bush should not be modified, but, rather, *preserved* as they were, to retain their value. The new emphasis was different from the way reservation had been promoted in the 1860s and 1870s.

I do not mean to suggest complete polarity, from the 1900s, between preservation of remnant native forest and the complete transformation for production and use of all other areas. Native tussock, an indigenous ecosystem, continued to be managed with greater or lesser sustainability and understanding as pasture for sheep and cattle, and there remained the perennial hope of a sustainable industry based on native flax (*Phormium tenax*). Fifty-three flax mills operated in Auckland province alone in 1913.⁴⁵ In addition to native beech production, in 1939 the Director of Forests still saw some place for sustainable production of rimu and kauri. ⁴⁶

In botanic gardens, native trees were introduced into otherwise totally modified and exoticised planted areas. The annual reports of Domain Boards present a largely unexamined picture of other reserves where, while their indigenous cover was often appreciated, careful modification nevertheless occurred to suit the public's recreational needs. Domains covered a significant portion of New Zealand: There were 457 of them in 1909, with a total area of 30,000 hectares. With many, the emphasis was on tennis courts and football grounds, but the 400 hectares of Wanaka Islands Domain, for instance, were used 'for picnics, as a sanctuary for flightless birds, and generally for the gratification of the lovers of the beautiful in nature'.⁴⁷

Preservation, however, did lead New Zealand in a new direction, away from the kind of blending which was earlier imagined and, in some respects, fulfilled. It was also distinctly different from the proposals put forward by Thomas Donne of the Tourism Department to combine the best natural attractions of 'Home' and colony. To him, introduced deer (such as those he intended for a park beneath Mount Cook in 1903) were the perfect complement to New Zealand's scenic delights. They would provide sport for rich tourists, yielding profit from lands that did not produce any other income. Donne championed the *Scenery Preservation Act*, and he supported the push for a national park in Fiordland, which would be 'home for a number of native birds which are too rapidly disappearing'. But he also thought it could be 'invaluable ...as a big-game forest'. He arranged for the release of eighteen wapiti in George Sound and of nine Virginia deer in the nearby Lake Wakatipu area in 1905, among many other introductions. 49

Donne's vision was of a utilised indigenous remnant, complying with European ideals of what constituted beauty, and of the uses to which beauty could be put. Deer, however, proved a controversial asset. Harry Ell was 'not in favour of turning animals into our State forests for those people to come here and shoot', since they damaged the undercover, affecting not only indigenous

vegetation but also water conservation. Leonard Cockayne explicitly stated that the introduction of exotic game into reserves was incompatible with the role of reserves as sanctuaries of native flora and fauna.⁵⁰

Donne's approach declined in favour when confronted with increasing support for protection on the basis of both scientific and nationalistic rationales. However, the idea that protection should concentrate strictly on indigenous species, and them alone, did not immediately take hold. While the arguments against the introduction of deer were immediately evident to many, few saw anything wrong with bringing in exotic fish or colourful plants. Mackenzie, for instance, praised 'that beautiful and useful plant the Scotch Heather', which was specifically recommended for plantation within Tongariro National Park. ⁵¹

Some consider that the division of land into either untouchable areas like native forest or usable areas like pine plantations and pasture lies at the core of New Zealand's preservation movement.⁵² The early history of environmental protection, however, presents a much more complex picture than this would imply. The encouragement of scenic reservation *close* to urban areas suggests there was no intention of divorcing these areas from people, while other areas – such as domains and deer parks – specifically allowed for varying degrees of environmental modification.

MANAGEMENT OF PROTECTED NATIVE FOREST

Just as the division between preservation and utilisation must include provisos, so is there a difference between preserving and leaving alone. The decade before 1913 witnessed a growing awareness of the long-term implications of preservation. At first, concern was primarily with legislative protection of the indigenous remnant, without a proper appreciation of practical aspects like fencing. However, a 1901 amendment to the *Egmont National Park Act* considered the removal of dead timber to reduce fire risk, while the Taranaki Scenery Preservation Society wanted scenic areas 'fenced off and protected by an outer ring of imported trees from cutting winds, and the destruction of the undergrowth by cattle'.⁵³ Already preservation was seen to entail a degree of active management.

The need not just to create but to *manage* reserves was stressed by Phillips Turner in his reports as Inspector of Scenic Reserves, and the *Scenery Preservation Amendment Bill* of 1910 specifically included 'provision in connection with fencing and protection against fires'. More comprehensively, in 1912 the scientist and politician G. M. Thomson asked Government to consider 'organised supervision' to prevent fires in reserves, 're-planting or sowing with quickgrowing native shrubs ... in areas that have been swept by accidental fire'.⁵⁴

In the event, no policy was implemented until after 1918. The War delayed action that would have been slow in coming, even in more favourable circumstances. Implementation of the Forestry Commission's proposals also held a

lower priority for Government than it did for men like Thomson. At the end of the 1913 parliamentary session, Prime Minister William Masssey said it was too late to debate the report that year, and he stalled again later. 'In view of what might happen in the next six months or so,' he said, 'there were other matters of more importance than scenery'. Focus on the War effort also caused the demise of the first Forest and Bird Society, founded in 1913 and not re-established until 1923. ⁵⁵

CONCLUSION AND DISCUSSION

The First World War, so evidently a great divide, has taken attention away from the existence of a strong movement towards the protection of the indigenous remnant, and in particular of native forests, in the pre-War period. It has also obscured the very important changes in the movement in these years, which I have focused on. Before 1903 protection had concentrated on marginal areas such as islands and mountain tops, either because here there was no conflict with settlement or because these better answered to European concepts of beauty. After 1903 protection was very specifically given to areas of bush, which New Zealanders now appreciated both as scarce and beautiful, and which they increasingly associated with their identity. Native forest was also increasingly valued for its tourist potential and as vegetation cover that held soil and water in place. However, there was a declining sense of the bush having worth as a renewable timber resource. By 1913 it no longer seemed credible that management and regeneration of the bush could satisfy many of the country's long-term timber demands.

In the decade between 1903 (when the Scenery Preservation Act was passed) and 1913 (when the Forest Commission reported), the different rationales for native forest protection were jostling for position. By the end of the period the way was clear for a new attitude to the indigenous remnant to gain dominance in the twentieth century. Arguments increasingly centred not on how the bush might be made productive, but rather on how much was to be saved in its 'virgin' state and how much sacrificed to clear-felling, prior to alternative land use or to afforestation with exotics.

In most western countries, preservation and conservation have continued to exist side by side. Indigenous species of trees are grown for timber. While particular sites and specific trees are totally protected, Britain uses its oak, Canada its pine, Australia its eucalypts. The situation that has emerged in New Zealand is different. While production, sustainable or not, from native forest continues on some private land, the ideal for many environmentalists would be complete preservation of all remaining natural indigenous forests. In a move that many considered overdue, experiments by a state-owned enterprise – Timberlands

– to sustainably manage rimu and native beech forests have been halted. Recent governments have edged out the logging of native trees on publicly-owned land, enforcing a complete ban in 2002. Timber plantations are almost exclusively of exotics (with a strong preference for radiata pine) and since 1999 there has been no government research into the planting or utilisation of native timbers. Thus, while forestry is still encouraged as an industry, it only involves species that are just as alien to indigenous ecosystems as sheep and wheat.

The promotion of native forests, which ran parallel to the promotion of forestry, has now become an entirely separate activity. Both have links with industry, since forest continues to benefit agriculture by reducing erosion and flooding. Native forests are also a tremendous drawcard for tourists. The rationale for forest protection, however, does not depend on these factors. Rather, the most significant motivation for preservation of the indigenous remnant is its contribution to national identity. Native forest has become associated with New Zealandness.

The Department of Conservation – some think it should be called the Department of Preservation – now controls more than 8 million hectares, or about 30 per cent, of the landmass of New Zealand. Roughly a third of this land has acquired national park status, which in the New Zealand context means almost complete protection from productive land use, and the proportion is increasing. The prime minister opened Rakiura National Park, covering most of Stewart Island, early in 2002, Timberlands' forests have been absorbed into existing parks, and further national parks are proposed. Such preservation differs fundamentally from the concept of conservation in nineteenth-century thinking on New Zealand's forests

We can now see that the 1913 Forestry Commission report condemned native forest not to total destruction but to non-production status. Until this time, the European conservationist trend had been towards indigenous production and integration with exotic production and exotic methods. This was the vision behind Julius Vogel's 1874 *Forests Act* and later legislation, but in 1913 scientific opinion very seriously eroded that vision. It encouraged New Zealand along the path of preservation, which separated off many (but never all) indigenous environments, isolating them from the main thrust of society towards total land transformation for agricultural production. Increasingly, this clashed with other 'conservationist' paths that sought greater integration with native ecosystems.

In the years since 1913, a curiously fractured society has evolved in New Zealand, which seeks *spiritual* sustenance through its native forests while being physically remote and gaining no *material* sustenance from them. Whether this approach was (and is) necessary or, on balance, the most constructive way forward – for New Zealand or any country – should be the subject of continuing debate.

NOTES

- ¹Best 1907, 200. I do not here discuss Maori attitudes to the forest or the effect of European legislation upon Maori in this period, but I acknowledge the importance of Geoff Park's 'evidence of a bitter and bedrock paradox of New Zealand history: preservation was also subordination'. Park 2000, 31.
- ²Appendices to the Journals of the House of Representatives 1909 C-4, 7; New Zealand Parliamentary Debates **124** (1903) 493; Appendices to the Journals of the House of Representatives 1913 C-12 Minutes of Evidence, 56. Despite the last remark, evidence of a specific hatred of the bush is hard to come by.
- ³New Zealand Parliamentary Debates **134** (1905) 744.
- ⁴Appendices to the Journals of the House of Representatives 1901 H-50, 5.
- ⁵ New Zealand Parliamentary Debates **126** (1903) 347; **163** (1913) 615.
- ⁶Appendices to the Journals of the House of Representatives 1909 C-1B, 3; Wilson 1991. The Scenery Preservation Board observed that 'as time goes on forest country will disappear from most ... parts of the colony, but its picturesqueness will be more appreciated as its extent diminishes'. Appendices to the Journals of the House of Representatives 1907 C-6, 36.
- ⁷ Harry Ell in New Zealand Parliamentary Debates **148** (1909) 1232.
- ⁸ New Zealand Parliamentary Debates **122** (1902) 965. Thom 1987 places far more emphasis on national parks than on scenic reserves.
- ⁹Hill 1987: Maclean 1999.
- ¹⁰ Appendices to the Journals of the House of Representatives 1905 H-2A, 1. For the background of public agitation in the 1890s which precipitated the 1903 act, see Lochhead 1994
- ¹¹ Appendices to the Journals of the House of Representatives 1907 C-6, 3–5.
- ¹² New Zealand Parliamentary Debates **134** (1905) 738. For a comparative analysis including some New Zealand material, see Dunlap 1999.
- ¹³Appendices to the Journals of the House of Representatives 1908 C-1B, 8.
- ¹⁴ Otago Witness 13 Aug. 1913, 72; New Zealand Parliamentary Debates **116** (1901) 373; Otago Witness 9 Jul. 1913, 14. An American initiative, Arbor Day was enthusiastically taken up in New Zealand from 1892.
- ¹⁵ Appendices to the Journals of the House of Representatives 1908 C-1B, 4
- ¹⁶ Appendices to the Journals of the House of Representatives 1907 C-1B, 1; 1907 C-1C, 1; 1908 C-1B, 10.
- ¹⁷ Appendices to the Journals of the House of Representatives 1911 C-1B, 3.
- ¹⁸ Appendices to the Journals of the House of Representatives 1913 C-12, xlv.
- ¹⁹ Appendices to the Journals of the House of Representatives 1913 C-12, lxx–lxxi, xxx.
- J. W. Hall, who had planted the trees, drew different conclusions from his experiments. While his main thought was that native trees should and could be planted in arboreta, presumably for ornament, he also regretted that 'the planting of our beautiful New Zealand trees has not generally been adopted, perhaps from the mistaken idea that they are difficult to culture' and stressed that their growth was not *so* much slower than many exotic species. Hall 1901, 388.
- ²⁰Cheeseman 1913, 19.
- ²¹ New Zealand Parliamentary Debates **122** (1902) 409; Cockayne 1908b, 2, 31, 4.

- ²² Appendices to the Journals of the House of Representatives 1913 C-1, xx; 1913 C-12, xxiii–xxiv.
- ²³ Appendices to the Journals of the House of Representatives 1913 C-12, xii. At least one contemporary questioned the need for an either/or decision: 'The principle on which the department works is that exotic trees which mature in comparatively short time, should be grown in preference to native trees, which take three or four times as long to grow into timber. Surely there is room for both. The fact that they have grown and flourished is sufficient indication that they suit soil, climate and locality. Even if they are not immediately profitable that should not be allowed to weigh too much in State operations.' Otago Witness 29 Jan. 1913, 15.
- ²⁴ For an understanding of the way forestry developed, by the then Director General of Forestry, see Poole 1969. For a general survey of the course of forestry in New Zealand, see Roche 1987, and Roche 1990.
- ²⁵ Appendices to the Journals of the House of Representatives 1913 C-12, xxii, and see Cockayne 1928, and Cockayne, 1936. Sustainable beech production received government support until the 1990s.
- ²⁶ Charles Heaphy in 1846, for instance, thought that the bush was 'Nature in her loveliest aspect', and 'beautiful was Remuera's wooded shore' in 1840, according to John Logan Campbell. Quoted in Temple 1998, 34, 56.
- ²⁷ Grossman 1909, 5; *Otago Witness* 2 Jul. 1913, 69; R Kipling, 'Our Lady at Wairakei', 29, in O'Sullivan 1992.
- ²⁸ New Zealand Parliamentary Debates **134** (1905) 739; **150** (1910) 865. A parallel literary response appeared in A. Adams' 1904 novel, *Tussock Land*, quoted in Temple 1998, 81–83.
- ²⁹ Appendices to the Journals of the House of Representatives 1912 C-6, 11; Otago Witness 15 Oct. 1913, 72.
- ³⁰ Baughan 1916.
- ³¹ Appendices to the Journals of the House of Representatives 1902 H-2, 18, 21.
- ³² The key papers are Cockayne 1907, 1908a, 1908b, 1909a, 1909b, and Cockayne and Turner 1908.
- ³³ Cockayne 1907, 15.
- ³⁴Cockayne 1901, 245.
- ³⁵ Cockayne 1901, 306. See also Thomson 1900, Guthrie-Smith 1907, and Star 1997.
- ³⁶ Appendices to the Journals of the House of Representatives 1908 C-8, 2.
- ³⁷ New Zealand Parliamentary Debates **127** (1903) 88.
- ³⁸ New Zealand Parliamentary Debates **126** (1903) 712; **127** (1903) 88.
- ³⁹ *Otago Witness* 29 Oct. 1913, 62; 5 Nov. 1913, 71; 12 Nov. 1913, 62. For the British perception, see Chapter 3 of Winter 1999.
- ⁴⁰ Appendices to the Journals of the House of Representatives 1903 H-2, iii.
- ⁴¹ New Zealand Parliamentary Debates **127** (1903) 400.
- ⁴²New Zealand Parliamentary Debates **163** (1913) 608; Appendices to the Journals of the House of Representatives 1913 C-12, 16; Cockayne 1909b, 41. National identity later became associated with the bush to such an extent that it sometimes sounded as though bush was the *only* indigenous environment. Tussocklands, wetlands, and the marine environment could all become equally recognised components of New Zealand's national identity.
- ⁴³Cockayne 1908a, 3; and see Cockayne 1923, 8, quoted in Leach 1994.

- ⁴⁴Grossman 1901, 393.
- ⁴⁵ Otago Witness 11 Jun. 1913, 1. On the utilisation of native tussocklands, see A. H. Cockayne 1910 and Wearing 1998.
- ⁴⁶ A. R. Entrican in *Appendices to the Journals of the House of Representatives* 1939 C-3; Roche 1990, 205.
- ⁴⁷ Appendices to the Journals of the House of Representatives 1909 C-10 1, 44. On the role of domains, see *New Zealand Parliamentary Debates* **151** (1910) 333. On botanic gardens see Shepherd and Cook 1988.
- ⁴⁸ Appendices to the Journals of the House of Representatives 1903 H-2, xv. Native bird preservation in New Zealand ran parallel to native forest protection. It similarly involved national identity, but was less complicated by the issue of utility, since New Zealanders of European descent rarely thought of native land birds as an exploitable resource.
- ⁴⁹ Appendices to the Journals of the House of Representatives 1905 H-2, 5.
- ⁵⁰New Zealand Parliamentary Debates 137 (1906) 637; Cockayne 1909b, 42.
- ⁵¹ New Zealand Parliamentary Debates **129** (1904) 620.
- ⁵² Perley 1998.
- ⁵³ New Zealand Parliamentary Debates **119** (1901) 281.
- ⁵⁴Appendices to the Journals of the House of Representatives 1911 C-6, 6; 1912 C-6, 9; New Zealand Parliamentary Debates **153** (1910) 837; **159** (1912) 164–165.
- ⁵⁵New Zealand Parliamentary Debates **167** (1913) 1052; **168** (1914) 101; **170** (1914) 92.

REFERENCES

- Baughan, B. 1916. *Studies in New Zealand Scenery*. Christchurch: Whitcombe and Tombs.
- Best, E. 1907. 'Maori Forest Lore, Part I'. *Transactions of the New Zealand Institute* **40**: 185–254.
- Cheeseman, T. F. 1913. 'The Age and Growth of the Kauri'. *Transactions of the New Zealand Institute* **46**: 9–19.
- Cockayne, A. H. 1910. 'The Natural Pastures of New Zealand: 1: The Effect of Burning on Tussock Country'. *New Zealand Journal of Agriculture* 1: 7–15.
- Cockayne, L. 1901. 'A Short Account of the Plant Covering of Chatham Island'. Transactions of the New Zealand Institute 34: 243–325.
- Cockayne, L. 1907. 'Report on a Botanical Survey of Kapiti Island'. *Appendices to the Journals of the House of Representatives* C-8.
- Cockayne, L. 1908a. 'Report on a Botanical Survey of the Tongariro National Park'. Appendices to the Journals of the House of Representatives C-11.
- Cockayne, L. 1908b. 'Report on a Botanical Survey of the Waipoua Kauri Forest'. Appendices to the Journals of the House of Representatives C-14.
- Cockayne, L. 1909a. 'The Necessity for Forest Conservation'. In W. C. Kensington (ed.). 'Forestry in New Zealand'. Appendices to the Journals of the House of Representatives C-4.
- Cockayne, L. 1909b. 'Report on a Botanical Survey of Stewart Island'. *Appendices to the Journals of the House of Representatives* C-12.
- Cockayne, L. 1923. *The Cultivation of New Zealand Plants*. Christchurch: Whitcombe and Tombs

- Cockayne, L. 1928. Monograph on the New Zealand Beech Forests: Part II: The Forests from the Practical and Economic Standpoints. Wellington: New Zealand Forest Service.
- Cockayne, L. 1936. 'Ecological-Economic Investigation of the New Zealand *Nothofagus* Forests'. In A. G. Tansley and T. E. Chipp (eds). *Aims and Methods in the Study of Vegetation*. London: British Empire Vegetation Committee, 330–340.
- Cockayne, L. and E. P. Turner. 1908. 'Report: Tongariro National Park'. *Appendices to the Journals of the House of Representatives* C-8.
- Dunlap, T. R. 1999. Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand. Cambridge: Cambridge University Press.
- Grossman, E. H. S. 1901. 'The People's Parks and Playgrounds in New Zealand'. *New Zealand Illustrated Magazine* 2: 285–91, 385–93.
- Grossman, J. P. 1909. The Evils of Deforestation. Auckland: Brett Printing and Publishing Co.
- Guthrie-Smith, H. 1907. 'The Grasses of Tutira'. *Transactions of the New Zealand Institute* **40**: 506–519.
- Hall, J. W. 1901. 'Remarks on New Zealand Trees Planted at Parawai, Thames, at and Subsequent to the Year 1873'. *Transactions of the New Zealand Institute* **34**: 388–389.
- Hill, S. and J. 1987. Richard Henry of Resolution Island. Dunedin: John McIndoe.
- Leach, H. M. 1994. 'Native Plants and National Identity in New Zealand Gardening: an Historical Review'. *Horticulture in New Zealand* **5**: 28–33.
- Lochhead, L. 1994. 'Preserving the Brownies' Portion: A History of Voluntary Nature Conservation Organisations in New Zealand, 1888–1935'. Ph.D. thesis, Lincoln University.
- Maclean, C. 1999. Kapiti. Wellington: Whitcombe Press.
- O'Sullivan, V. (ed). 1992. *The Oxford Book of New Zealand Short Stories*. Auckland: Oxford University Press.
- Park, G. 2000. 'The Ecology of the Visit'. Landfall 200: 23–34.
- Perley, C. 1998. 'Assessing Timberlands' Sustainable Beech Management System using Concepts of Ecosystem Health and Ecosystem Management'. *New Zealand Forestry*, **43**: 3–7.
- Poole, A. L. 1969. Forestry in New Zealand: The Shaping of Policy. Auckland: Hodder and Stoughton.
- Roche, M. M. 1987. Forest Policy in New Zealand: An Historical Geography, 1840–1919. Palmerston North: Dunmore Press.
- Roche, M. M. 1990. History of New Zealand Forestry. Wellington: GP Books.
- Shepherd, W, and W. Cook. 1988. *The Botanic Garden, Wellington: A New Zealand History*, 1840–1987. Wellington: Millwood Press.
- Star, P. 1997. 'Plants, Birds and Displacement Theory in New Zealand, 1840–1900'. British Review of New Zealand Studies 10: 5–21.
- Temple, P. (ed). 1998. *Lake, Mountain, Tree: An Anthology of Writing on New Zealand Nature and Landscape*. Auckland: Godwit Publishing.
- Thom, D. 1987. Heritage: The Parks of the People. Auckland: Lansdowne Press.
- Thomson, G. M. 1900. 'Plant-Acclimatisation in New Zealand'. *Transactions of the New Zealand Institute* **33**: 313–323.

PAUL STAR

- Wearing, A. E. 1998. 'Plants, People and Landscapes: Changes in and Prospects for the Vegetation of Central Otago and Upper Waitaki Drylands'. Ph.D. thesis, University of Otago.
- Wilson, G. 1991. 'The Urge to Clear the Bush: A Study of the Nature, Pace and Causes of Native Forest Clearance on Farms in the Catlins District, 1861–1990'. Ph.D. thesis, University of Otago.
- Winter, J. 1999. Secure from Rash Assault: Sustaining the Victorian Environment. Berkeley: University of California Press.