Indigenous and Settler Interactions with Forests in New Zealand c. 1840-1874: A Case Study of Wairarapa

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Abstract

Throughout history, forest management and cultivation have been intrinsic parts of land use across many cultures. With particular reference to Wairarapa, this investigation specifically encompasses the differences in silvicultural interactions between tangata whenua and Pākehā in Aotearoa New Zealand between 1769 and 1874. Drawing on archival materials, contemporary reports in newspapers, and memoirs, this thesis uses comparative and qualitative methods to assess the use of forest land by Māori and colonial groups, the differences in approach between these groups; the effects that their differing silvicultural methods had on the environments in which they operated; and the extent to which the 1874 New Zealand Forests Act might be regarded as evidence of the emergence of a 'conservation ethic' among Pākehā.

Reflecting on primary evidence concerning the Māori experience of land resource colonisation in New Zealand forests, this thesis concludes that prior to contact with Europeans, there existed a distinct 'conservation ethic' in Māori society regarding forest management. Between 1769 and 1874, however, this 'conservation ethic' experienced significant challenges, conflicting with Eurocentric forest management methods centred on clear-felling with a view to afforestation by exotic hardwoods, crops, and grasses. Accordingly, Māori impacts on New Zealand forest management during this period were characterised by efforts to move toward traditional forest management, whereas Pākehā forestry development policies were mainly motivated by colonialism.

With reference to Wairarapa, it is argued that in the initial period of Pākehā settlement after 1840, European settlers, squatters, and renters needed to recognise and to some degree adopt Māori approaches to forest management. Once Crown purchases became more extensive in the region, however, Wairarapa's forests were increasingly viewed as an obstacle to 'development,' resulting in their destruction by European landholders. However, while much of Wairarapa's Māori-owned forest land was alienated and deforested after 1853, Māori continued wherever possible to maintain their traditional practices in forestry and actively engaged in legal processes to protect their interests.

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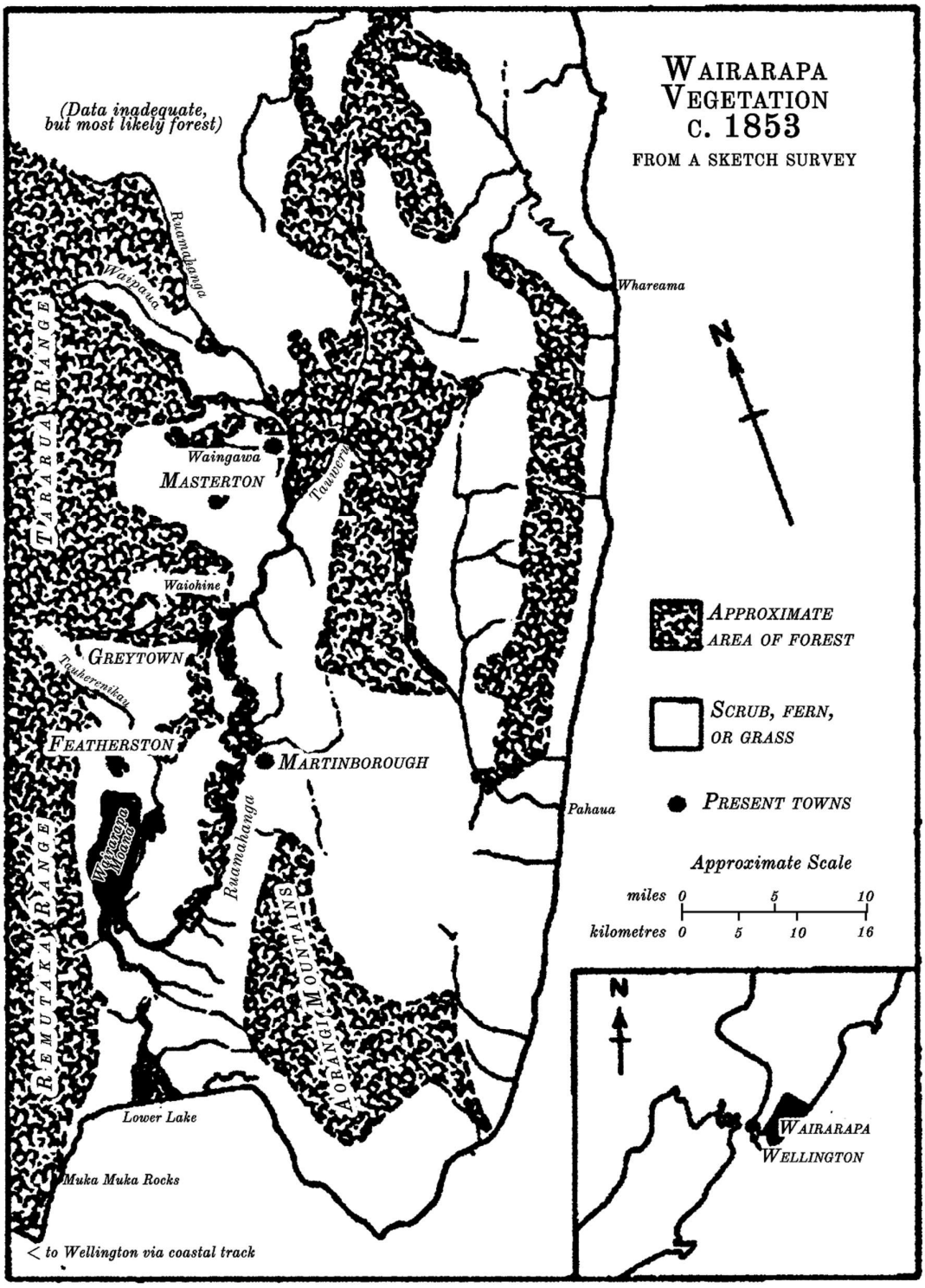
Glossary and clarification of terms

mana	Prestige, power, influence; when used alongside whenua, refers to land ownership and stewardship
tapu	Sacred, restricted, prohibited
rāhui	Ritual reservation, conservation, or restriction of an area
noa	Unrestricted, ordinary
toki	Adze: a tool or weapon commonly used to carve and cut wood, but which also carries ritual significance
rangatira	A leader, one who carries mana; often signifies chiefhood over hapū or iwi. Also an adjective signifying influence, greatness, or power
ariki	A high-ranking leader within an iwi; some overlap with rangatira
aruhe	*Pteridium esculentum*, Austral bracken; an edible rhizomatic fern
hue	*Lagenaria siceraria*, a gourd
kumara	*Ipomoea batatas*, a sweet potato
tītoki	*Alectryon excelsus*, a soapberry tree; produces fruit pulp, grain oil, and flexible wood
tī kouka	*Cordyline australis*, "cabbage tree"; produces edible leaves
uwhi	*Dioscorea alata*, a root vegetable
aute	*Broussonetia papyrifea*, paper mulberry; domesticated tree used to produce fabric, no longer present in Aotearoa
tuna	*Anguilla dieffenbachii*, a freshwater eel
kūkū	*Hemiphaga novaeseelandiae*, a large species of pigeon; can also refer to edible bird species in general
kiore	*Rattus exulans*, the Polynesian rat; later referred to *Rattus norvegicus* and *Rattus rattus*
mahinga kai	A garden, subsistence cultivation, or place where food can be gathered; can also refer to traditional practices of food gathering and foraging

whānau	An extended family unit
hapū	A political unit consisting of multiple whānau with a shared origin; a sub-tribe
iwi	A political unit with a defined territory; a tribe or nation
whenua	Land, territory, ground, soil
tangata whenua	Indigenous people, usually referring to Māori
Te Awakairangi	The Hutt Valley, north of Wellington
Te-Whanganui-a-Tara	Wellington Harbour
Wairarapa	A region east of Wellington and south of Hawke's Bay, defined using various terms throughout history; this paper uses Ngāti Kahungunu's definition, which encompasses the area from Turakirae south to Orongorongo, bordered by the Tararua and Remutaka mountain ranges
South Wairarapa	Currently, a district encompassing the towns south of Carterton and Mount Holdsworth; this paper also includes Carterton District in the definition, for brevity
Ruamahanga	A river flowing through much of Wairarapa, from the Tararua Ranges south to Palliser Bay
Ngāti Kahungunu	An iwi present in Wairarapa and Hawke's Bay
Rangitāne	An iwi present in Wairarapa, Manawatū, and Marlborough
Aotearoa	The currently used name for New Zealand in Te Reo Māori; while not historically used to refer to the entire archipelago, this paper uses the modern definition throughout
motu	Island, nation, country; colloquially, refers to New Zealand as a whole
Wellington Province	A province of New Zealand from 1853 until 1876; referred to Wellington and its environs alongside Wairarapa, Manawatū-Whanganui, and, until 1858, Hawke's Bay
tūpuna/tīpuna	Ancestors, grandparents, forefathers

Map of study area, including vegetation, rivers, and major European settlements.[1]



[1] Adapted from R. D. Hill (1963). "The Vegetation of the Wairarapa in Mid-Nineteenth Century". *Tuatara* 11, no. 2, 85.

Introduction

Environmental historians have contributed to exploring the progression of forest management in Aotearoa in several ways. Throughout the last four decades, historians have placed increasing significance on the study of environmental change with respect to colonialism, especially regarding the interactions that Pākehā had with their surroundings in the initial periods of European settlement. There has also been limited research into the characteristics of Māori interactions with forests, including subsistence agriculture and timber use, mostly through oral histories, archaeological surveys, and investigations related to claims made under Te Tiriti o Waitangi.

There is, however, a significant dearth of information regarding the differences between tangata whenua and Pākehā attitudes toward forests, the individual attitudes of those affected by environmental change, and the longer-term effects of silvicultural policies and attitudes.[2] Moreover, there has been little research conducted on the experiences and interactions of smaller groups, both settlers and Māori, with afforestation, deforestation, and conservation practices during the period of intensive colonisation that occurred throughout the nineteenth century.

The intention of this study is to clarify the nature of forest land development in Aotearoa during this period, focusing specifically on comparing the policies and attitudes of groups, both Māori and Pākehā, who were affected by these developments. This study will explore the reasons and motivations behind changing forest land management policies; the character of forest land use throughout this period; and the social, economic, and political effects of changes in forest land development by 1874. It does so with specific reference to Wairarapa. Wairarapa is particularly suited as a case study for this topic. The progression of European settlement in the area is well-documented, especially regarding forest policy, and considerable evidence exists regarding the nature of deforestation and its associated political, social, and economic motivations. Moreover, Land Court testimonies – and, later, Waitangi Tribunal reports – highlight Wairarapa

[2] Paul Star and James Beattie (2010). "Global Influences and Local Environments: Forestry and Forest Conservation in New Zealand, 1850s-1925." *British Scholar* 3, no. 2, 217.

as an area of particular importance to Ngāti Kahungunu and Rangitāne, members of which have documented the effects and events relating to Māori and European forest development prior to the extensive colonisation of the area. While Land Court documents are often biased towards Crown affairs, their documentation of the movements and actions of Māori are nonetheless useful; therefore, materials relating to the Land Court can be used to highlight certain key aspects of Māori habitation in Wairarapa across time, though some details may be dubious in nature. The period in question allows for the use of newspapers, archival material, and other texts as primary sources for this study.

While much has been written on attitudes toward the indigenous forests that early European settlers encountered, comparatively few papers exist on Māori responses to colonial forest policy. The majority of works on the subject were written from the 1980s onward, presumably as historical Māori land claims became increasingly publicised in the New Zealand media. There were, however, some dedicated examinations of early European land use, and Māori responses, from the early twentieth century. Early explorations of Māori responses to shifts in forest land usage remain generally useful, though contain significant bias towards European experiences in developing land. Elsdon Best, who published a number of works on Māori society, commented on changes in Māori subsistence agriculture throughout European colonisation in his 1925 work *Māori Agriculture*, for example, examining the effects of the introduction of various plants from 1769 onwards.[3] Initially published during the same period, Raymond Firth's 1929 work *Primitive Economics of the New Zealand Māori* contains extensive discussion of the social and economic impacts of European forest colonisation on Māori across the motu, suggesting links between the political isolation of the King Country and the economic effects of land development policies. Firth also documented the centrality of subsistence farming and gathering to Māori societies stating; the "clearing of the ground, planting, and other processes" remained central to Māori communities even into the later periods

[3] Elsdon Best (1976). *Maori Agriculture: The Cultivated Food Plants of the Natives of New Zealand, with some Account of Native Methods of Agriculture, its Ritual, and Origin Myths.* Wellington: Government Printer, 273.

of initial European settlement.[4] Firth also explored political opposition to deforestation and afforestation throughout multiple iwi, though this account is generalised across all iwi and hapu rather than a particular location.[5] Nonetheless, examinations of New Zealand forests throughout this time remained sparse in general; while brief, industry-specific overviews of forestry were sometimes published, dedicated historical examinations of deforestation and forest land development remained few.[6] However, throughout the mid-twentieth century, a number of papers were published on historical deforestation in Aotearoa, representing a renewed interest in forest management, commencing with Critchfield's paper on Southland pastoralism and Hargreaves's case study of Northland missionary agriculture.

Critchfield, writing in 1954, relies mainly on contemporary secondary sources recording the advance of dairy farming, generally skewed toward Pākehā experiences. Primary sources provide data on Southland's chief historical exports, while non-quantitative primary reports entirely originate before 1830.[7] This examination largely ignored the concerns of tangata whenua besides discussing Māori subsistence farming.[8] Critchfield asserts that European settlers prioritised agriculture following Britain's official acquisition of Southland, attempting to eradicate endemic plants such as tutu, as well as clearing forest in Waiau and Mataura, both to process timber and to facilitate the advance of European pastoralism.[9] Critchfield also discusses the status of Rakiura in terms of colonial forest management, albeit briefly; saw-milling occurred on its southern coast to provide for whaling and fishing. Māori sources are rarely used; descriptions of Māori-Pākehā interactions are limited to treaty obligations post-1840, in which colonists avoided felling forests to which they had nebulous claims.[10]

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[4] Raymond Firth (1959). *Primitive Economics of the New Zealand Maori, 2nd ed.* Wellington: Government Printer, 353.

[5] Firth, *Economics*, 454.

[6] For example: Leon McIntosh Ellis (1922). *The Progress of Forestry in New Zealand.* Wellington: Government Printer; David Ernest Hutchins (1919). *New Zealand Forestry.* Wellington: State Forest Service.

[7] H.J. Critchfield (1954). "The Growth of Pastoralism in Southland, New Zealand." *Economic Geography* 30, no. 4, 288.

[8] Critchfield, "The Growth of Pastoralism in Southland", 287.

[9] Critchfield, "The Growth of Pastoralism in Southland", 287-290.

[10] Critchfield, "The Growth of Pastoralism in Southland", 292.

Hargreaves' examination of nineteenth-century Northland pastoralism is far more thorough in its investigation of colonial-Māori interactions in forest management. In contrast to Critchfield, there is a strong reliance on primary sources, which are used to provide qualitative assessments of intercultural relations as well as noting the historical progression of missionary farming.[11] Hargreaves lends a further level of significance to Māori forest subsistence agriculture; Critchfield attributes its general decline to the physical dominance of Europeans in the area, while Hargreaves notes that this was due to a rigorous effort by missionaries to replace Māori methods with English pastoral ideas, attempting to prepare Northland for forest clearance and the subsequent replacement of native forest with foreign crops.[12] While Māori sources are sparsely used, their interactions with European farming operations are discussed in-depth: the implications of tapu regarding the remaining Māori agriculture fixtures are discussed and evaluated comprehensively, reflecting a much deeper acknowledgement of early intercultural relations than Critchfield.[13]

In terms of similarities within these early sources, Critchfield and Hargreaves both note the difficulties Europeans had cultivating cleared land. Critchfield argues that colonists required radical changes in soil composition in Southland; the acidic soil left behind by podocarps meant that intensive soil neutralisation was needed before any imported crops or groundcover could thrive there.[14] Moreover, the high variation in soil drainage meant that farming in Southland was characterised by large acreages, low grazing capacities, and poor availability of stockfeed, a situation which contributed to deforestation.[15] In Critchfield's view, forest management in Southland was viewed as unnecessary, with forests either seen as an obstacle to European "fat lamb and dairy farms," a limited resource that did not warrant renewing (as with Rakiura), or a natural border which "must be written off completely".[16] Critchfield characterised forest maintenance as

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[11] R. P. Hargreaves (1962). "Waimate: Pioneer New Zealand Farm." *Agricultural History* 36, no. 1, 45.
[12] Hargreaves, "Waimate", 39-40; Critchfield, "The Growth of Pastoralism in Southland", 288.
[13] Hargreaves, "Waimate", 42.
[14] Critchfield, "The Growth of Pastoralism in Southland", 286.
[15] Critchfield, "The Growth of Pastoralism in Southland", 286-290.
[16] Critchfield, "The Growth of Pastoralism in Southland", 283, 285, 299.

incompatible with the growth of Pākehā pastoralism; new outposts of European agriculture necessitated a full-scale clearance of forest, which invariably occurred after land acquisition.[17]

Hargreaves, on the other hand, argues that the continuation of colonial deforestation was overall unsustainable for agriculturalists, especially due to the utilisation of European practices. British methods of land clearing, such as the use of bean hooks to cut through foliage, were largely ineffective whereas Māori favoured targeted burning. These methods were mainly intended to promote the growth of aruhe over previously forested land and were used on smaller scales than European techniques.[18] Ash was recycled as fertiliser for subsistence agriculture.[19] This technique, with a highly targeted and specific spatial reach, made pastoralism increasingly untenable. Compounding this issue, missionaries refused to offer any attractive compensation for work, especially after 1895.[20] Hargreaves concludes that colonial failures to adopt Māori-influenced methods, as well as their failure to offer any produce that could not be more easily and sustainably produced by Māori forest management, led to the dysfunction and eventual collapse of Northland missionary farming.[21] Hargreaves's view is representative of an historiographical current that would become increasingly prevalent later in the century: that Māori were not passive with regard to their forest environments, but actively involved with their continued maintenance. While this certainly is not representative of all colonial agriculture, this examination provides a basis for other intercultural studies of New Zealand forest land management.

More recent examinations of colonial forest management have expanded upon the forest histories of Critchfield and Hargreaves. Roche's overview of Canterbury pastoralism, alongside Beattie and Star's analyses of settler opinions on forest land management,

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17 Critchfield, "The Growth of Pastoralism in Southland", 283, 285, 299.
18 Hargreaves, "Waimate", 40-41.
19 Hargreaves, "Waimate", 40.
20 Hargreaves, "Waimate", 43.
21 Hargreaves, "Waimate", 45.

comprise a large part of New Zealand forest historiography on the subject.[22] McNeill, alongside Shultis, represents an international perspective on early colonial forest conservation and deforestation in comparisons of British imperial nations' responses to forest management.[23] The use of recorded oral testimony is also represented within silvicultural historiography in Park's survey of twentieth-century attitudes toward forestry.

Beattie asserts that pre-colonial Māori forest management was seasonal but rejects the idea that it was entirely reliant on natural processes. This type of land use is valuable to consider in this study, as it provides a useful background to the silvicultural situation that faced Aotearoa by the turn of the century. As Hargreaves alludes to, natural fertilisers and the production of potash, alongside the regular burning of aruhe and mānuka "at the required time of the year", contributed to Māori forest-based agriculture directly before European contact.[24] Māori forest management, before European colonisation became widespread, was based on – as Hargreaves reports – seasonal "gardens at the edge of the bush," and the natural growth of fruit, sustaining a limited population.[25] Subsistence agriculture in this manner was propelled by the principles of rāhui – the deliberate restriction of resource use to avoid overconsumption – and could generally be described as sustainable following a "resource crunch" after the extinction of large avifauna in Aotearoa at some point in the three hundred years before contact.[26] Māori interactions with forests were heavily impactful, resulting in environmental changes and heavy resource consumption when contrasted with the years before settlement.[27] These effects can be divided into deforestation, from which timber resources involved in construction and manufacturing could be derived; afforestation, by which native groundcover species were generally replaced by tussock and aruhe; and conservation, wherein resources were deliberately left unused to avoid population

[22] M. M. Roche (1984). "Reactions to Scarcity: The Management of Forest Resources in Nineteenth-Century Canterbury, New Zealand." *Journal of Forest History* 28, no. 2, 85-87.
[23] J. R. McNeill (1994). "Of Rats and Men: A Synoptic Environmental History of the Island Pacific." *Journal of World History* 5, no. 2, 323.
[24] Star and Beattie, "Global Influences", 194; Hargreaves, "Waimate", 40-41.
[25] Star, "New Zealand Environmental History", 470-471; Hargreaves, "Waimate", 38.
[26] Star and Beattie, "Global Influences", 194.
[27] Star and Beattie, "Global Influences", 194-195.

crises.[28] Forests were also used, to a lesser environmental impact, as a fauna-based food source; kererū, tui, tuna, and other vertebrates were widely utilised by Ngāi Tahu and other groups in areas, usually southern, where flora were less able to be used as food resources.[29] Beattie reaches roughly the same conclusion as Hargreaves; that Māori methods of forest land resource management were generally more sustainable than European colonists'.

Following initial colonisation, the question then turns to the motivations behind European deforestation and afforestation. Michael Roche, evaluating both prior secondary research and texts from the time period, claims – similarly to both Hargreaves and Critchfield – that early mass deforestation was motivated by the ability of settlements to thrive, as well as projected profit for private companies and individuals.[30] Banks Peninsula provided the most forest for European exploitation, and this forest was earmarked by British surveyors to "supply twenty Canterbury Settlements for centuries," and rudimentary licensing systems – without adequate enforcement – were established "to protect those individual licensees who made ... roads and saw pits to facilitate their operations."[31] Adding to this, Star asserts that settlement, in the nineteenth century, "depended on unforested land," and the generalised apathy that Europeans displayed toward the dedicated preservation of native bush contributed to land clearance: "their purpose was to change the land so that they could prosper. They burnt forest and they grazed cattle and sheep."[32] Any area designated "waste" land was invariably slated for exploitation at a later date.[33] Such an argument corroborates Critchfield's assertion that forest management in periods of early settlement was mainly driven by potential for settlement and industry, and that there was certainly some emphasis on private economic stimulus.[34] Taylor's interview-based reports on Tarawera land confiscations reinforce the notion that Pākehā pastoral needs were prioritised over

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28 Star and Beattie, "Global Influences", 193-195.
29 Star and Beattie, "Global Influences", 194.
30 Roche, "Reactions to Scarcity," 85.
31 Roche, "Reactions to Scarcity", 85-86.
32 Paul Star (2003). "New Zealand Environmental History: A Question of Attitudes." *Environment and History* 9, no. 4, 468.
33 Star, "New Zealand Environmental History", 469.
34 Roche, "Reactions to Scarcity", 87; Critchfield, "The Growth of Pastoralism in Southland", 287-290.

Māori forest resource usage in this respect: "in them days all the creeks were clean, took the Pākehā to dirty them ... [they] approached me to sell our shares of the number eight block at Tarawera so they could mill the timber."[35] Overall, this viewpoint again characterises 19th-century colonial forest land use as unsustainable and deliberately exploitative.[36]

McNeill's comparative overview of Pacific deforestation takes a different stance. McNeill argues the dependence of the Royal Navy in the South Pacific on colonial timber stocks constituted the main reason for early deforestation; kauri forests satisfied this need until extensive clear-felling and burning resulted in low stocks of indigenous timber.[37] Pastoral farming succeeded the maritime industry as the prevalent colonial economic sector around this time, and McNeill ascribes this to widespread British settlement in the area.[38] The wholesale clearance of land is regarded as an unforeseen side-effect of colonial mechanics: New Zealand forests' "long isolation from other ecosystems had made them vulnerable to rapid disruption."[39] Addressing the fate of Māori forest management, McNeill elaborates on Hargreaves; phosphate and other fertilisers imported from French Polynesia subsumed the use of natural ash in agriculture, subjecting soil to chemical change that made subsistence farming unfeasible, as well as changing the chemical composition of native soils.[40] Both Roche and Hargreaves note, similarly, that exotic afforestation mainly resulted from passivity towards native biota preservation; fir and gorse, intended as standing timber stocks and territorial markers respectively, were planted on "waste land" not designated for settlement or pastoralism, unintentionally creating footholds for invasive exotic species instead of preserving native plants.[41] McNeill broadly characterises deforestation and afforestation as unintentional

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35 Bevan Taylor, (1994). "Esk Forest Claim: Mohaka-Waitere Confiscations – Kaumatua Interviews." Wai 55/201, J006, Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand, 10.

36 Roche, "Reactions to Scarcity", 85-87; Hargreaves, "Waimate", 39-43; Critchfield, "The Growth of Pastoralism in Southland", 287-290.

37 McNeill, "Of Rats and Men", 323.

38 McNeill, "Of Rats and Men", 323-324.

39 McNeill, "Of Rats and Men", 324.

40 McNeill, "Of Rats and Men", 331-332.

41 Roche, "Reactions to Scarcity", 88; Hargreaves, "Waimate", 39-40; McNeill, "Of Rats and Men", 318.

side-effects of settler pastoralism and industry, and Māori involvements with forest land management policy as passive.

The argument for unintentional afforestation is not represented well in other comparative works. Shultis, comparing British imperial responses to land management, argues that prevailing ideologies leaned heavily away from rural forest conservation.[42] While public concerns did significantly pressure the colonial government to create intra-urban native forest parks, there was equal opposition to rural forest reserves, representing that settlers preferred settlement-driven exploitation to conservation.[43] An oral survey of both Māori and Pākehā agricultural landowners, conducted by Park et al., provides a good basis for this assertion; the survey suggests that any non-pastoral land use was unfavourable among the rural population both during and after the initial period of European colonisation.[44] From an early colonial viewpoint, the use of land for settlement superseded its preservation; overall, "land that can be farmed should be farmed. Breaking in land for pastoral farming was part of the virtuous behaviour of the 'early settlers'." Responding to Roche, the paper posits that afforestation posed no benefit to European pastoralism: "some farmers have had cause to express regret that 'good farmland' is being planted in forests."[45] Further, it is proposed that Crown settlement and pastoralism on "waste land" was motivated by such an ideology, indicating that even agriculturally-framed forest management was negatively viewed by colonists during this time.[46] Taylor's report provides a description of such developments from a Māori perspective. Traditional methods of forest land management, as well as reserving undeveloped forest, were consistently eschewed in favour of pastoralism and pine afforestation: "there were no other hapū living on these lands ... for some reason we could not under stand [sic] his name was taken off the agreement, only to find later it

[42] J. Shultis (1995). "Improving the Wilderness: Common Factors in Creating National Parks and Equivalent Reserves During the Nineteenth Century." *Forest & Conservation History* 39, no. 3, 124.
[43] Shultis, "Improving the Wilderness", 124.
[44] J. Park et al. (2002). "The Moral Life of Trees: Pastoral Farming and Production Forestry in Northern New Zealand." *Journal of Anthropological Research* 58, no. 4, 535; Star, "New Zealand Environmental History", 469.
[45] Park et al., "The Moral Life of Trees", 528.
[46] Park et al., "The Moral Life of Trees", 528.

was due to non occupation."[47] It is likely, then, that settler-colonial resource management was deliberately exploitative, rather than an accidental alteration of New Zealand biota.

Star theorises that Māori involvement in conservation had a lasting and generational effect, though generally relying on the allowances of European idealism.[48] Māori attempts to sustain traditional forest conservation and resource management techniques are well-described in oral works. Taylor notes that, before confiscation and development into a sheep station, the area surrounding Lake Tūtira provided "natural resources such as berries, kererū, tui, and tuna," with "a reserve of eighteen acres at Ridgemount ... [Ngāti Hineuru hapū] objected strongly to the sale of the Tūtira block and the taking of the lake."[49] Māori reportedly "walked off the farms" due to differences in management ideas, illustrating underlying ideologies of conservation, subsistence, and Māori occupation.[50] Such evidence contradicts the Eurocentric nature of many sources, though the argument largely relies on tangata whenua having to operate within a colonial milieu rather than on their own terms.

There remain other important sources of information on New Zealand history that should be acknowledged. *Tangata Whenua: An Illustrated History,* a wide-scope history of Māori by Atholl Anderson, Judith Binney, and Aroha Harris, contains an extensive record on Māori cultural and social currents and the changes they experienced prior to and during European colonisation. While the text does not specifically address forest economics and the changes therein, information on early developments in subsistence agriculture and, more broadly, historical attitudes of Māori towards conservation, deforestation, and species loss are addressed throughout the book. Moreover, *Tangata Whenua* signals the importance of Wairarapa to early Māori settlement of Aotearoa.[51] Ranginui Walker's *Ko Whawhai Tonu Matou: Struggle Without End*, a text focusing on

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47 Taylor, Esk Forest Claim, 4.
48 Star, "New Zealand Environmental History", 470.
49 Taylor, Esk Forest Claim, 2-7.
50 Taylor, Esk Forest Claim, 7.
51 Atholl Anderson, Judith Binney, and Aroha Harris (2014). *Tangata Whenua: An Illustrated History*. Wellington: Bridget Williams Books, 82-85.

socio-political upheavals throughout Māori history, is similarly valuable. Walker briefly explores the attitudes of Māori towards land leasing and its effects on local biota, for example, with a focus on "the protection of forests."[52] For the purposes of a general overview on Māori attitudes towards the environment, *Ko Whawhai Tonu Matou* serves as a valuable resource, though it does not contain specific information relevant to the case study during the period under review. More generally, other texts such as Grey's *Aotearoa and New Zealand: A Historical Geography* and Davidson's chapter "The Polynesian Foundation" in *The Oxford History of New Zealand* also provide general overviews of Māori settlement in Aotearoa and its effects on the environment, as well as Māori societal interactions with the changing face of nature on the archipelago.[53] Similarly, *Environmental Histories of New Zealand*, a collection of nineteen chapters edited by Pawson and Brooking, contains a wealth of information on forest land tenure changes, economic motivations of European settlement, and the public works policies of successive Crown administrations during the mid-nineteenth century and earlier, most notably contained within the initial ten chapters, particularly those by Anderson, Stokes, McAloon, and Hearn.[54] McAloon's chapter includes information specific to environmental change in Wairarapa, moreover; the establishment of pastoralism and sheep runs in Wairarapa, including the settlement at Wharekaka, are noted as examples of the advancement of settler capitalism in the area.[55] As such, this book comprises a valuable source of secondary information on Wairarapa's environmental history, especially during this thesis' period of study.

Whereas earlier works in New Zealand silvicultural historiography tend to present a uniform idea of European apathy toward Māori forest management, more recent works emphasise that settlers espoused a diverse range of opinions concerning forest

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[52] Ranginui Walker (1990). *Ko Whawhai Tonu Matou: Struggle Without End*. Auckland: Penguin, 178.

[53] Alan Grey (1994). *Aotearoa and New Zealand: A Historical Geography*. Christchurch: Canterbury University Press; Janet M Davidson (1981). "The Polynesian Foundation." In W. H. Oliver and B. R. Williams (eds.), *The Oxford History of New Zealand* (Wellington: Clarendon), 3-28.

[54] Eric Pawson and Tom Brooking (eds.) (2002). *Environmental Histories of New Zealand*. Melbourne: Oxford University Press.

[55] Jim McAloon, "Resource frontiers, environment, and settler capitalism: 1769-1860," in Pawson and Brooking, *Environmental Histories*, 62-63.

preservation. Recently, there has been extensive debate surrounding the origins and purposes of colonial clear-cutting policies, preservation efforts by individuals, governments, and institutions, and the role of Māori in reforming land management during the late nineteenth century. There are marked gaps in New Zealand silvicultural historiography in these areas, especially regarding the progression of Māori responses to colonial clear-felling. Accordingly, this study focuses on these areas to clarify the origins, processes, and effects of forestry in both Māori and colonial milieus during the mid-nineteenth century. To engage with this wide range of factors, as well as the generally fragmentary nature of primary sources – especially Māori – during the period in question, a collective approach combining traditional and non-traditional source material in a generally qualitative and comparative manner is adopted. Special focus will be given to the experiences of individuals and small groups such as whānau and hapū.

Such an approach is necessitated by the dearth of statistical and quantitative sources surrounding Māori and their interactions with the environment in the years leading up to 1874. Methods employed by historians such as Roche and Hargreaves are effective in characterising the use of forested land by Pākehā during the nineteenth century; however, these approaches mainly rely on statistics and written accounts, types of material which were considerably less accessible to Māori during this time. Taylor's method of direct oral questioning addresses the character of Pākehā silvicultural advancements in localised regions; this provides a solid foundation upon which social and political conclusions can be reached, though lacks the precision necessary to build a clear overview of Māori forest management without losing vital details. Therefore, this thesis will employ, in the interests of detail and accurate comparison, non-governmental records, Crown political documents, and published records of oral sources, which will include aspects of environmental change that are often overlooked, especially the experiences of Māori groups.

In more specific terms, this study will encompass a written thesis undertaken by means of qualitative comparative analysis and critical review of documentation, archaeological findings and other relevant texts. The gathering of contemporary perspectives on forest

land management and its effects should remain central to this investigation, especially those of Māori in both colonial and non-colonial contexts. The dynamics of forest land management and development in New Zealand up to 1874 are complex and have been characterised in previous literature as being defined by social conflict between multiple different factions, both colonial and Māori. As a direct result, the systematic comparison of perspectives and actions, as they existed at the time is necessary to fully describe and explain the various impacts of forestry development on Māori, whether as a part of Pākehā-centric political action, or independently as iwi and hapū.

This will primarily involve the examination of archival sources dating from the period in question, with a specific emphasis on journals and newspapers centring on Māori experiences of forest transformation in a settler-colonial milieu. By analysing and commenting on the localised perspectives of both Māori and Pākehā workers and landowners, exemplified through papers such as the *New Zealand Mail* and *Te Waka Maori,* significant information can be gained on the character and progression of forest land policy and the views of both European and Māori elements on such developments. Māori periodicals, such as *Te Karere o Poneke* and *Te Karere Maori,* provide politicised Māori perspectives on colonial forest management, which can be compared with concurrent Pākehā views.

Moreover, there exist several archival sources that provide direct evidence directly pertaining to forest management, horticulture, and conservation during the period in question. The Inward Correspondence to the Provincial Secretary (ICPS) records, for example, provide descriptions of Māori forest land management from a primarily European perspective, which could be employed as case studies for Māori-Pākehā interactions in this area. Collections of documented testimonies to the Land Courts also provide individual and group perspectives on specific cases of land development and alienation. The various submissions and supplements to Waitangi Tribunal reports often include similar documentation, as well as providing important information on whakapapa, traditional usage of land prior to contact with Europeans, and written recollections of forest land use throughout the period in question.

Secondary sources will be used, where relevant, to frame and augment the perspectives put forward in primary literature. Among these sources are the works of social historians such as Taylor, Star, Park, and Roche, who have extensively identified and described historical and contemporary attitudes towards forest farming and conservation in New Zealand. Such works provide an analysis and commentary of Māori and Pākehā interactions in forest management, delineating the evolution of land management techniques throughout early periods of settler-Māori interactions, their social and economic impacts, and contributing to the discussion of the overall influence of forest development policy within an increasingly colonial context. Interpretive oral histories and surveys of iwi and hapū, conducted because of Waitangi Tribunal district inquiries, alongside the various historical and archaeological reports related to these inquiries, may also serve as important resources in describing the transition between Māori and colonial forest management from a tangata whenua perspective.

Through the comparative analysis of contemporary perspectives on forest management leading up to 1874, as well as the incorporation of relevant secondary examinations, Māori impacts on policy and actions regarding forest management, conservation, and afforestation can be characterised, defined, and explained in the context of colonial-Māori interactions in a settler environment.

This thesis is structured in such a manner as to clearly demarcate the differing approaches to forest land management between European and Māori groups and individuals throughout the period, to fully examine the various approaches taken to forest land management policy by involved parties. A separation between European and Māori approaches to forest policy is also more conducive to thorough comparative analysis, allowing for more effective comparisons and contrasts between actions and attitudes. However, this thesis also acknowledges the significant overlap between European Public Works projects and the labour of Māori workers, in addition to the importance of intercultural interactions during the early stages of land leasing and sales, for example; in these cases, the perspectives of each group will be addressed separately, while

acknowledging the interactions between them and their implications for the questions this thesis investigates. Each chapter focuses on a different period, which aids discussing the subjects contained within thematically and in the context of surrounding events. Firstly, forest land management will be discussed through pre-contact and pre-colonial narratives by Māori until 1840, as well as early colonial perspectives by Europeans from the eighteenth century until the signing of Te Tiriti o Waitangi. During this period, many of the principles, and, in tandem, tikanga surrounding natural resources emerged, necessitating an analysis firstly of Māori perspectives on forest management, and, subsequently, the generally more recent developments of European interactions in forests. Secondly, forest land management during the consequent decade of colonisation will be explored in detail, analysing the various currents of conservationism and exploitation using Wairarapa as an intensive case study. Finally, the thesis will address Māori and European perspectives on forest management throughout the period from 1850 until 1874, roughly spanning the time between the initiation of land purchases in Wairarapa until the passage of the Forests Act of 1874. Changes experienced by each group will be analysed alongside each other throughout these chapters, continuing to clearly mark distinctions between European and Māori approaches.

Chapter I: Background

Between 1769 and 1840, forest management changed significantly in New Zealand. Whereas Māori communities had developed a distinct 'conservation ethic' to sustain forest resources, early European settlers viewed forests primarily as a commercial resource, or an obstacle for immediate removal. This chapter commences with a discussion of Māori uses of forest resources prior to 1840. It then proceeds to evaluate the impact of European contact on forest management.

I: Māori uses of New Zealand forest resources before 1840

According to Māori oral histories, Polynesian peoples settled Aotearoa following a series of voyages from their ancestral homelands of either Hawaiki or Wawauatea, led by a number of navigators throughout the early second millennium.[56] Among these voyages was that of the *Mahuhu-ki-te-Rangi*, which, according to a Ngāti Whatua tradition, sailed from Matatera to Hokianga during this early stage of migration; with its arrival, hue, kumara, titoki, uwhi, and aute were introduced, marking a point of origin for forest gardening in Aotearoa. Ngāti Porou and Ngāti Kahungunu reportedly introduced these crops and horticultural techniques further south.[57] Another tradition, this time among hapū in Te Tai Tokerau, holds that forest land resource use in Aotearoa began with the arrival of the waka *Tainui,* which transported hue, karaka, kumara, and taro to Whangaparaoa. These histories are consistent with archaeological and genetic evidence, which suggests that these transported plants - with some exceptions - were first introduced around the Te Tai Tokerau and Tamaki Makaurau areas between the eleventh and thirteenth centuries.[58]

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[56] R. Taonui (1994). "Te Haerenga Waka: Polynesian Origins, Migrations, and Navigation." Masters thesis, University of Auckland, 266.

[57] Taonui, "Te Haerenga Waka," 268; J. Cowan (1930). *The Maori: Yesterday and To-day.* Christchurch: Whitcombe and Tombs, Ltd., 23-24; M. Johnson et al. (2015). "He Ahuwhenua Taketake: Indigenous Agroecology." Ngā Pae o te Maramatanga report 11RF02-BHUOT, Ngā Pae o te Maramatanga, Lincoln, New Zealand, 53.

[58] Morris, M. (2020). *Common Ground: Garden histories of Aotearoa*. Dunedin: Otago University Press, 20.

Prior to the settlement of Aotearoa, the archipelago was "almost entirely forest covered below [the] tree line" with conifers, ferns, and angiosperms.[59] During this early period, termed the "Colonisation" phase by Anderson et al., extensive land clearance by burning occurred.[60] This largely encompassed intentional burning of forest, which could be carried out for three main reasons; firstly, to promote the continued growth of aruhe, a "reliable source of carbohydrate";[61] secondly, to clear land for settlement, travel, and agriculture; third, for hunting moa.[62] Timber is not considered to have been a major part of the Māori economy prior to European contact.[63] Land clearance was often combined with planting of exotic flora, and afforestation by low-lying shrubs, flaxes, and ferns.[64] For the first centuries of habitation in Aotearoa, forest use by Māori was generally exploitative, "plundering those resources that offered the greatest return from the least effort," hastening the removal of large areas of climatically unstable forest."[65] During this period, there was a sharp decline in forest bird populations, resulting in the loss of a number of major forest-derived food resources by the end of the early period – most notably, the outright extinction of the nine species of moa present in both Te-Ika-a-Maui and Te Waipounamu, as well as the local extinctions of some bird species such as ducks and rails.[66]

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[59] A. P. Druce (1983). *Indigenous Higher Plants (Ferns, Gymnosperms, Flowering Plants) of Anaura Bay Scenic Reserve*. Wellington: New Zealand Plant Conservation Network, 1-3; R. M. Ewers et al. (2006), "Past and future trajectories of forest loss in New Zealand." *Biological Conservation* 133, no. 3, 312-313; McGlone, "Sustainable indigenous forestry," 1-2.

[60] A. Anderson (2016). "The Making of the Maori Middle Ages." *Journal of New Zealand Studies* 23, no. 1, 2-18; Anderson, Binney, and Harris, *Tangata Whenua*, 85.

[61] L. Furey (2006). *Māori Gardening: An archaeological perspective*. Wellington: Department of Conservation, 121.

[62] R. B. Allen, L. R. Basher, & J. Comrie (1996). *The use of fire for conservation management in New Zealand*. Wellington: Department of Conservation, 12; Ewers et al., "Past and future trajectories," 312-313.

[63] Anderson et al., "Wairarapa ki Tararua," 7.

[64] Furey, *Māori gardening*, 120.

[65] R. Anderson et al. (2010). "The Wairarapa ki Tararua Report, no. III." Wai 863, Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand, 832; Cameron, "Indigenous Forests", 50.

[66] R. N. Holdaway and C. Jacomb (2000) "Rapid extinction of the Moas (Aves: Dinornithiformes): Model, Test, and Implications". *Science* 287, no. 1, 2250; B. F. Leach (1979). "Maximizing Minimum Numbers: Avian Remains from the Washpool Midden Site". *New Zealand Archaeological Association Monograph* 2, no. 1, 108, Anderson et al., "Wairarapa ki Tararua," 8.

This dramatic alteration of the forest environment necessitated the modification of food-gathering and land clearance techniques.[67] Notably, land use techniques changed as the settlers began to adapt to the highly variable climate of Aotearoa, as well as applying concepts such as whakapapa, tapu, and rāhui to subsistence farming techniques. According to a report compiled by Takirirangi Smith for Rangitāne o Wairarapa, forest land use following this period "was conducted with great care and ritual protocol ... reinforced by tikanga and kawa."[68] A system of customary rights and authorities based on whakapapa and whanau unit relationships emerged that, by the mid-sixteenth century, had become the determining factor in the consumption of forest resources that can be characterised as a sustainable, "large, organised labour input" based on an annual cycle, whereas cultivation within forests had initially followed a "perennial or low-intensity system".[69] The cyclical nature of resource gathering is reflected in archaeological evidence at Palliser Bay; at the Washpool archaeological site, Leach observed signs of periodic habitation by Māori, as well as agricultural manipulation of the soil along river terraces dating to around 1538.[70] Moreover, karakia were mandated in any food-gathering activity as a method of maintaining a spiritual connection to whenua.[71] Customary rights among iwi, hapū, and whānau were subject to change through systems of tribute and trade, as well as the existence of "small 'advance guard' settlements" in areas that were more desirable in terms of resources.[72]

Such a "conservation ethic" became an integral part of Māori culture following this shift in attitude. Generally, this involved the consumption of "medium and smaller forest bird"

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[67] Anderson et al., "Wairarapa ki Tararua," 832.

[68] T. Smith (2002). "Land, water, and resource use in Wairarapa: an overview report for Ngāi Tumupuhiaarangi me ona hapū karanga (Wai 429): the evidence of Takarirangi Smith" (typescript). 2005-027-2/14, Alexander Turnbull Library, Wellington, New Zealand, 10; Anderson et al., "Wairarapa ki Tararua", 832-836.

[69] Mair, "Wairarapa Protohistoric", 21; Furey, "Māori Gardening," 120.

[70] H. M. Leach (2020). "Evidence of Prehistoric Gardens in Eastern Palliser Bay." In Leach, H. and Leach, B. F. (eds.), *Prehistoric Man in Palliser Bay*. Wellington: Museum of New Zealand Te Papa Tongarewa, 142.

[71] Anderson et al., "Wairarapa ki Tararua", 8.

[72] G. A. Phillipson (1995). "Rangahaua Whanui District 13: The Northern South Island. Waitangi Tribunal report, Waitangi Tribunal, Wellington, New Zealand, 14."

species, such as kokako, ruru, tui, kākāriki, and korimako.[73] Horticulture - especially in forested areas - became increasingly important to Māori subsistence activities "to supplement their hunting, fishing, and gathering," as did the annual, "high-intensity" method of harvesting plant products.[74] There were numerous aspects to this shift. Foremost, horticulturalists developed methods for the storage and shelter of cultivated plants and animal carcasses. At Washpool, for example, by creating gardens within circles of boulders and large rocks, kumara and other tubers could be cultivated without succumbing to the cold environment of Palliser Bay.[75] Storage pits and "food platforms" were also used, containing tubers, pōuwhiwhi and kōwhai seeds, preserved bird carcasses, and aruhe.[76] In the later period of pre-European contact, villages at the mouth of the Pahaoa River north of Palliser Bay are known to also have dedicated cultivation sites for harakeke and karaka - "almost invariably the case" in Rangitāne and Ngāi Tara settlements along the eastern coast.[77]

Secondly, it became necessary to establish restrictions on certain forest resource stocks to prevent their depletion. Māori land tenure rights can be generally categorised as take kitea, or ownership by discovery; take tūpuna, or ownership by ancestral links to the land; take raupatu, or ownership through force; and take tuku, or acquisition through gifts.[78] All of these rights could be overridden by take ahi kā, or acquisition through sustained occupation. This facilitated a highly communal system of ownership linked mainly to whakapapa and, in turn, solidified links between the land and iwi, hapū, and whānau groups. In terms of forestry, such an ideology created a strong linkage between forest territory rights and the sustainability of the people and settlements within; maintaining the well-being of people and their environment contributed to the mana of both the whenua and the group occupying it.[79] This resulted in the restriction of certain

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[73] B. F. Leach (2020). "Excavations in the Washpool Valley at Palliser Bay." In Leach, H. and Leach, B. F. (eds.), *Prehistoric Man in Palliser Bay.* Wellington: Museum of New Zealand Te Papa Tongarewa, 89; Anderson et al., "Wairarapa ki Tararua," 819.

[74] Anderson et al., "Wairarapa ki Tararua," 820; Morris, "Common Ground", 20.

[75] Anderson et al., "Wairarapa ki Tararua," 820; Leach, "Excavations", 112.

[76] Leach, "Excavations", 112-113; Anderson et al., "Wairarapa ki Tararua," 7.

[77] J. M. McEwen (1986). *Rangitāne: A Tribal History.* Auckland: Reed Methuen, 88-89.

[78] S. J. Rotarangi (2011). "Planted forests on ancestral land: the experiences and resilience of Māori land owners." Ph. D. thesis, University of Otago, 30-31.

[79] Rotarangi, "Planted forests," 30-31.

areas to ensure the continued mauri of forested land. Tapu was observed in relation to gathering particular forest resources at various times of year; rāhui were placed on specific trees, rivers, and hills to facilitate tuna, kūkū, and kiore food resource conservation.[80] For instance, at Palliser Bay, kererū were only hunted during the winter months; during the autumn, freshwater fish and molluscs, alongside tuna, waterfowl, kumara, hue, and aute were harvested and stored; and during the summer, the focus shifted to the consumption and storage of kaimoana, fruits, and flax seeds.[81] Forest-wide rāhui were also observed when a highly important member of the local hapū died, when a large tree was felled for the construction of waka, or during the winter hunting season to prevent heavy bird or timber resource depletion.[82] Nearby, at Whakaoriori, early accounts indicate that there were methods by which birds were attracted to kumara plantations and snared at certain times within the subsistence cycle.[83] These territorial claims and customs were maintained until well after European contact. Around the Manawatū River, for example, Rangitāne maintained strict control of their various subsistence-based settlements, including "an eeling settlement at Taonui, a rat-catching settlement at Kairanga and a small pā at Raukawa ... where hinau berries were gathered."[84] This control was retained under threat of conflict with other iwi and hapū, such as that which erupted between Rangitāne and Ngāti Toa in 1819.[85] These territorial and culturally-based restrictions grew in importance until the mid-nineteenth century, which marked the advent of dedicated European colonisation efforts, due to increased resource scarcity and a shift towards pā-based living.[86]

Third, "intricate rituals" around the tilling of soil, the eradication of pests, and the maintenance of the seasonal harvesting cycle arose to preserve forest and horticultural resources. At Matariki, for example, the ground surrounding horticultural cultivations in South Wairarapa was ritually cleared of weeds and vines as a communal whānau or hapū

[80] Anderson et al., "Wairarapa ki Tararua", 8.
[81] Anderson et al., "Wairarapa ki Tararua," 7, 820.
[82] Best, *Forest Lore*, 6-7.
[83] C. Bannister (1940). *Early history of the Wairarapa*. Masterton: Wairarapa Times-Age, 123.
[84] McEwen, *Rangitāne*, 121.
[85] McEwen, *Rangitāne*, 121.
[86] P. Simpson (1988). "He tōtara wahi rua he kai na te ahi". *Landscape* 37, no. 1, 22.

unit, placing great symbolic importance on the "grubbing tools" of the ko and the timo.[87] Mauri and whakapakoko atua were commonly found in gardens to ensure that kumara planting grounds were kept clear, and tohunga tapu generally oversaw any planting activity. Fitzroy remarked in 1838 that "the Patches are very neatly kept, and [tangata whenua] are very particular in not passing across the Sweet Potato Grounds."[88] Such traditions also governed who could access certain resources, especially the routes used to harvest plant productions; pepeha, waiata, and kōrero solidified certain groups' connections to the whenua where horticulture was conducted.[89] On a larger scale, Te Kaeaea of Ngāti Tama was known to have established aukati, or cleared, deforested or marked lines "which no one may pass", as a tactic to avoid conflict or reserve territory for singular iwi; this was done in 1821 after a battle at Motunui, as well as in 1842 following the establishment of Makahinuku Pā at Te Awakairangi.[90] Clearly, by the time of European contact, Māori had become exceedingly well-established in a "conservation ethic", ensuring that "the amounts gathered rarely outran regeneration rates".[91]

While a minor part of the pre-1769 economy, timber still played a role in Māori forest land usage. Tōtara timber products, especially, occupied a high status in Māori society from Ngā Kakano onwards due to its "architectural and carving properties".[92] Tōtara, among other similar timbers such as rimu and rata, were useful in the construction of "canoes, houses, defensive stockades, and a great variety of implements."[93] For example, an archaeological site in the Moikau Valley at Palliser Bay, dated to the late twelfth century, shows extensive use of "small, shaped tōtara posts" that served various structural purposes in supporting the frame of a whare puni, as well as a number of pieces of decorative shaped tōtara. The same method was used to re-build the house

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[87] Johnson et al., "Agroecology," 56-58; Morris, "Common Ground," 28.
[88] Morris, "Common Ground," 28; House of Commons, "Report from Select Committee", 97.
[89] Anderson et al., "Wairarapa ki Tararua," 821.
[90] A. Ward (1998). "Māori Customary Interests in the Port Nicholson District, 1820s-1840s: An Overview: A Report Commissioned by the Waitangi Tribunal." Wai 145, M001, Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand, 34-35; K. R. Cairns, notes and research papers relating to the Wairarapa, c. 1971. 88-070, Alexander Turnbull Library, Wellington, New Zealand.
[91] H. Fleet (1984). *New Zealand's Forests*. Wellington: Heinemann, 12.
[92] D. O. Bergin (2000). "Current knowledge relevant to management of *Podocarpus tōtara* for timber." *New Zealand Journal of Botany* 38, no. 3, 347.
[93] Best, *Forest Lore*, 2.

following a fire.[94] Similarly-constructed whare were observed in the Bay of Islands during the voyage of the *Astrolabe* in 1840, indicating that this particular method of construction was widespread and used throughout the entire period before European colonisation.[95] Tōtara bark, though not observed at this site, was also used in whare and pā construction in order to thatch roofs and strengthen outer fortifications; its use in waterproofing muttonbird storage kete, patua, and waka has also been documented, alongside its numerous medicinal usages.[96] The timber economy during the earlier periods of settlement appears to have been motivated by small-scale settlement and subsistence on bird and fruit resources; later, the demand for the timber itself was heavily increased by pā-building activities, broadcast burning, and the outbreak of territorial warfare into the seventeenth century.[97]

Though direct felling without a view to longer-term cultivation had "little effect on the forest", the methods by which this was carried out – and the purpose of such clear-felling – were significant in pre-contact Māori communities, and are a good example of the general character of Māori forest land usage up to the seventeenth and eighteenth centuries.[98] Typically, clear-felling was an arduous process; often, single trees were felled at any one time during the process of forest clearance purely due to the difficulty of removing tōtara, kahikatea, or other rākau rangatira.[99] The process employed various types of toki, or adze, and whao, or chisel.[100] First, a large, coarse implement would be used to scarf the tree; this was usually a toki titaha or toki whakapae, which were heavy stone tools used for rough work.[101] Having removed the bark, a controlled fire was then started inside of the trunk, and an implement would be used to cut away the burnt matter at set intervals. This process could be enhanced by the use of the larger toki as battering

[94] N. J. Prickett (2020). "Prehistoric Occupation in the Moikau Valley, Palliser Bay." In Leach, B. F. and Leach, H. (eds.), *Prehistoric Man in Palliser Bay*. Wellington: Museum of New Zealand Te Papa Tongarewa, 35.

[95] Prickett, "Moikau Valley," 35; O. Wright (1955). *The Voyage of the Astrolabe, 1840*. Wellington: Reed, 70-71.

[96] Simpson, "He tōtara", 22.

[97] Simpson, "He tōtara," 19; Best, *Forest Lore*, 2; Bergin, "Management of *Podocarpus tōtara*," 347; Phillipson, "The Northern South Island," 13-16.

[98] Fleet, *Forests*, 13.

[99] Fleet, *Forests*, 13.

[100] E. Best (1912). *The Stone Implements of the Maori*. Wellington, A. R. Shearer, 22.

[101] Best, *Stone Implements*, 23-24.

rams to further weaken the structure of the tree.[102] Such clearance was generally carried out for the purposes of "clearing adjacent ground" to plantations and settlements, as evidenced by the abundance of "charred trees and scrub" in clearances at Washpool.[103] This served to create systematic clearings on the edges of forested land, which facilitated the establishment of dedicated horticultural plantations alongside the fertilisation of topsoil using charcoal.[104] Timber extracted using this method was used most commonly for the construction of carved waka, patu, and more durable wooden utensils such as toki hengahenga.[105] The extent to which this occurred appears to have been relatively small, relying – as did most Māori horticulture in the pre-contact period - on customary rights and a widespread "conservation ethic"; Ngāti Rangatahi, for instance, took timber only "as they needed" at Te Awakairangi, making only periodic visits for timber harvesting purposes.[106] Moreover, felling in this manner was accompanied by ritual and ceremony that emphasised mana whenua over the potential for resource use; Tutakangahau, a Tuhoe rangatira active towards the end of the nineteenth century, cited a karakia related to tree felling that served as an apology for killing one of the children of Tane Mahuta.[107] The character of this direct felling, then, seems to have been non-exploitative and motivated by the necessity of carrying out subsistence agricultural activities on cleared land, alongside the incidental value of large trees for the construction of tools and waka.

Forest burning appears to have been a major factor in how Māori immediately prior to European contact interacted with their forest environment. Deliberate burning was widespread for the purposes of clearing land for settlement and horticulture, as previously described; the rate at which this occurred had, by this time, decreased significantly.[108] While deliberate and ceremonial forest burning did occur, and remained widespread – such as the ahi taitai, a ritual fire for improving "forest industries" -

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[102] Fleet, *Forests*, 13; E. Tregear (1904). *The Maori Race*. Whanganui: A. D. Willis, 319-320.
[103] H. Leach (1984). *1000 years of gardening in New Zealand.* Wellington: Reed, 39-40.
[104] Leach, *1000 years*, 42-44.
[105] Fleet, *Forests*, 13; Best, *Stone Implements*, 26-28.
[106] Ward, "Port Nicholson", 73.
[107] J. P. Holman (2007). "Te painga rawa o ngā ao rua: Te Pehi me te putanga ke o te wairua Māori." Ph. D. thesis, University of Canterbury, 265.
[108] E. Williams (2009). "Māori Fire Use and Landscape Changes in Southern New Zealand." *Journal of the Polynesian Society* 118, no. 1, 180-181.

accidental fire was an equal part of Māori forest use throughout this period.[109] There was a very high risk of fire damage to Māori settlements, even after forest clearing had occurred; this was mainly due to the wooden construction of most whare and marae, "fern bedding, open fires for cooking and the preservation of food ... signal fires," and other anthropogenic causes of fire, alongside the often turbulent and drought-prone climate of Aotearoa, especially in the south.[110] The testimony of Tukanohi Tamihana describes an incident of widespread accidental burning in the South Wairarapa during the eighteenth century, which was compounded by these factors: around the Ruamahanga River, the indigenous tōtara forest, which had been affected by kaikaka or heart rot, was accidentally set alight by an eeling camp's cooking fire during a drought, causing "most of the bush in the Wairarapa" to burn.[111] Similarly, the isle of Matiu at Te-Whanganui-a-Tara was affected by an incidental fire at a Ngāti Mutunga tuber plantation during a Ngāti Haumia expedition to the region.[112] These fires significantly affected forest land resources, and regeneration of indigenous forest stocks such as tōtara was "rare".[113] Indeed, at the Ruamahanga River, Tamihana asserted that tōtara was subjected to natural afforestation by "fern, Wild Irishman [tumatakuri], and mānuka" scrub alongside "matai and white pine"; these observations are consistent with the findings of Perry et al., who record "widespread loss of tall forest and its replacement with seral vegetation and especially bracken" following anthropogenic fires before European contact.[114] Fire, then, appears to have been a significant means by which Māori manipulated the forest environments of Aotearoa during this period.

At the various points of European contact that occurred during the late eighteenth and early nineteenth centuries, numerous ecological and horticultural changes impacted the way Māori continued to interact with forest ecosystems. Firstly, European crops became

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[109] Best, E. "The Polynesian Method of Generating Fire, With some Account of the Mythical Origin of Fire, and of its Employment in Ritual Ceremonies as observed among the Maori folk of New Zealand." *Journal of the Polynesian Society* 33, no. 131 (1924), 153; Williams, "Fire Use," 180.

[110] Williams, "Fire Use," 180.

[111] Bannister, "Wairarapa", 1.

[112] Ward, "Port Nicholson," 81.

[113] G. L. W. Perry, J. M. Wilmshurst, and M. S. McGlone (2014). "Ecology and long-term history of fire in New Zealand." *New Zealand Journal of Ecology* 38, no. 2, 162.

[114] Bannister, "Wairarapa," 1-2; Perry et al., "Fire ecology", 162.

popular across Aotearoa, beginning with the introduction of the potato from 1769 onwards. The potato was introduced to Aotearoa in several early expeditions, such as those by Cook and du Fresne, who directly gave seed potatoes to tangata whenua and established small cultivation areas around the archipelago.[115] This series of introductions had a wide-reaching impact on Māori society. Compared to kumara, uwhi, and taro, European potatoes had a number of advantages: they were easier to store, had a much higher crop yield, and could be grown more easily, especially in the colder areas of Te Waipounamu.[116] Another major factor in the quick adoption of the potato was its unique ability to grow in substandard soil conditions, negating the need for the complex methods of soil preparation - and their associated rituals - often required by kumara and other crops.[117] According to oral tradition, Cook's initial introduction of the potato to Te Whanganui-a-Hei was followed by three consecutive seasons of intensive cultivation in order to ensure a wide enough supply to distribute to other iwi.[118] Further south, however, at Totaranui and Motuara at Queen Charlotte Sound, potatoes were directly received by Māori during their interactions with Cook's crew, who planted a number of experimental European crop gardens there from 1773 to 1777.[119] By the early years of the nineteenth century, the potato had become a valuable staple crop of coastal and inland iwi and hapū; arguably, it became "the basic food crop of New Zealand".[120] From 1801 to 1814, European missionaries and traders such as John Savage and Samuel Marsden noted the presence of dedicated potato plantations across Te Ika-a-Maui, showing that, by this time, the crop had become firmly entrenched in Māori communities.[121]

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[115] Leach, *1000 years*, 98; Fleet, *Forests*, 23-24.

[116] G. Harris "An indigenous Māori potato, or unique Māori cultivars?" *Journal of the Polynesian Society* 114, no. 1 (2005), 72; Anderson, A. (1998) *An Ethnohistory of Southern Māori, A.D. 1650-1850.* Dunedin: University of Otago Press, 72-74.

[117] R. J. Cameron (1964). "Destruction of the Indigenous Forests for Maori Agriculture During the Nineteenth Century". *New Zealand Journal of Forestry* 9, no. 1, 101-102; Anderson et al., "Wairarapa ki Tararua", 823; Estrada de la Cerda, R. (2015) "Traditional knowledge systems and crops : case studies on the introduction of kūmara (Ipomoea batatas) and taewa Māori (Solanum tuberosum) to Aotearoa/New Zealand". Masters thesis, Massey University, 90.

[118] Leach, *1000 years*, 98.

[119] Leach, *1000 years*, 99.

[120] Anderson et al., "Wairarapa ki Tararua", 823.

[121] Leach, *1000 years*, 101.

The introduction of the potato had several major effects on Māori interactions with forest systems. The ability of the potato – termed taewa by tangata whenua - to be grown across all seasons and in all environments allowed for it to thrive in inland forest clearings, and for it to be exempted from the 'seasonal round' of Māori subsistence horticulture.[122] Generally, Māori taewa crops were grown in forest gardens "on the side of a wood" and on previously unused ground. This had two main effects: the natural decomposition of rotten leaves and branches on this land would easily accommodate the conditions demanded by taewa, and also that forest trees and shrubs would provide a shelter for the crops during the harsher winter months and their associated frosts.[123] Ngāti Tūhoe of Te Urewera, for instance, planted taewa "in every direction through the bush" to compensate for a cool climate and to shelter them using the forest, and also potentially to create wide-reaching and scattered food reserves that could be used in case of conflict or displacement.[124] However, the growing of taewa also necessitated other interactions with the forest environment. According to an early European account by the missionary William Yate, the sites of taewa plantations were often cleared by burning: "the trees are burnt down, the branches consumed, and the potatoes placed between the roots, or upon any little bare spot."[125] This does not appear to have been a universal practice: Ngāi Tuhoe "probably did not burn off a significant quantity of bush" during this period, though land development in this manner did eventually occur.[126] Regardless, forest clearance for the cultivation of taewa had a major impact on forest resources. The increased amount of land required for taewa growing necessitated higher rates of controlled burning by Māori, especially given the customary rāhui placed on taewa acreages after three harvests.[127] It is also likely that uncontrolled burning occurred, resulting in a far greater area of cleared forest land than would otherwise be used for taewa planting; this may also have been compounded by the economic desires to create food surpluses or to trade with Europeans.[128] The introduction of the taewa to tangata

[122] Anderson et al., "Wairarapa ki Tararua", 863.
[123] Cameron, "Destruction", 102; Estrada de la Cerda, "Traditional Knowledge", 89.
[124] A. Miles (1999). "Rangahaua Whanui District 4: Te Urewera". Waitangi Tribunal report, Waitangi Tribunal, Wellington, New Zealand, 83.
[125] W. Yate (1835). *An Account of New Zealand*. London: R. B. Seeley & W. Burnside, 156-157.
[126] Miles, "Te Urewera", 8, 52.
[127] Cameron, "Destruction," 102; Estrada de la Cerda, "Traditional Knowledge," 93.
[128] Cameron, "Destruction", 102; Estrada de la Certa, "Traditional Knowledge," 93.

whenua, then, can be considered to have been part of a major milestone in the progression of Māori systems of interactions with forests in Aotearoa.

L. de Sainson (1839). *Defrichement d'un champ de patates.* PUBL-0034-2-387, Alexander Turnbull Library, Wellington, New Zealand.

Further impacting Māori interactions with forests were other crops that Europeans introduced from the eighteenth century. The introduction of turnip, pumpkin, maize and brassica varieties to Totaranui in 1773, and the subsequent re-introduction of maize by Philip Gidley King twenty years later, led to widespread changes in the botanical composition of Māori horticulture by the beginning of the nineteenth century.[129] These crops were starkly different from traditional Polynesian varieties in that they were best suited to growth in "highly fertile alluvial soils" rather than the "light well-drained soils" favoured by kumara, uwhi, and taro.[130] This affected Māori horticulture by causing diversions in the subsistence cycle, much as taewa had also done; the different climate and soil conditions demanded by these European crops necessitated changes in custom and in the physical locations of planting areas. In Te Urewera, Ngāti Tuhoe's "possession

[129] Leach, *1000 years*, 99-101.
[130] Estrada de la Certa, "Traditional Knowledge", 68.

of the fertile alluvial flats of Opouriao and Waimana" allowed for more efficient growth of maize and taewa alike; in turn, political and economic changes occurred within Ngāti Tuhoe that reflected this changing rohe.[131] The cultivation of maize posed many of the same threats to indigenous forest that the increased popularity of taewa had brought. At Moturoa in 1814, the missionary John Nicholas observed a small clearing consisting of "unpromising" maize stalks "planted with potatoes", indicating that early Māori attempts at growing maize were heavily informed by the technique for growing taewa, even in alluvial zones.[132] Combined with allowing "the Māori occupants of areas where traditional kumara growing was impossible" movement to alluvial plains during the subsistence cycle, it is clear that the European crops introduced at the end of the eighteenth century significantly altered Māori interactions with forest environments.[133] By 1840, Rangitāne and Ngāti Kahungunu of Wairarapa had also become aware of the advantages brought by European-style agriculture and trade, and had made changes to their forest environs as a result (though interest remained tenuous until the dedicated European settlement of the area after McLean's purchases of 1853).[134]

Another impact of European contact was the spar trade.[135] European sailors prized kauri timbers, alongside the wood of other rākau rangatira such as kahikatea and tōtara, as the ideal material for the construction of spars; however, liaison with Māori was often necessary or desirable in order to procure these efficiently.[136] Diplomacy between Māori and spar traders was generally conducted with a view to encouraging Māori to either fell trees themselves or, more commonly, to transport timber between forest land and the shoreline. In 1800, for example, Māori were employed by the crew of the *El Plumier*, a Spanish ship, to transport kahikatea logs to the mouth of the Waihou river, for which they received "axes and cloth" as payment; five years earlier, the *Fancy* had also employed hapū at Waihou to cut over two hundred spars, with payment in iron.[137] By

[131] Miles, "Te Urewera," 51-52.
[132] Leach, *1000 years*, 102.
[133] Leach, *1000 years*, 109.
[134] Anderson et al., "Wairarapa ki Tararua," 30-32.
[135] G. Phillipson (2005). "Bay of Islands Māori and the Crown, 1793-1853: An Exploratory Overview for the CRT." Wai 1040/A1, Waitangi Tribunal, Wellington, New Zealand, 53.
[136] Wigglesworth, "Timber and flax trade," 12.
[137] Fleet, "Forests", 25.

1807, the market had increased in size to the extent that Port Jackson newspapers were advertising the stocks of timber as "desirable pine logs"; whalers and sealers commonly accessed these resources, necessitating a higher level of involvement by Māori workers culminating in a "rapid supply of rafted timber" by the time of the arrival of the *City of Edinburgh* and *Boyd* expeditions.[138] As with trade in taewa and harakeke, the European timber trade was generally received enthusiastically by Māori; in 1806, Ngāpuhi organised a number of clearance and timber transport operations around Wairoa, though these concluded with a series of abductions by Captain Dalrymple of the *General Wellesley* a year later.[139]

The extensive clearances of forest due to the spar trade and the expansion of European agricultural operations resulted in marked changes to the indigenous landscape. By 1815, the land clearance at Wairoa had advanced to the extent that "timber for building had to be towed from south of the Bay", and kauri was already becoming "difficult to procure" at the Bay of Islands, the forest having "been cut without attention to the quality and character" of the timber itself.[140] To Māori, this represented another aspect of the dramatic shift that the economy was undergoing. Instead of the seasonal horticultural round being the focus of Māori economics, a shift was occurring so that settlers and traders themselves "were a desirable commodity, providing one of the keys to acquiring sought-after goods."[141] By 1827, this had progressed to the extent that Earle remarked that "the chief things to induce [Māori] to work are firearms and powder," showing the dominance of European weaponry and tools in this new economy.[142] The acquisition and control of European-desired trade supplies, then, became a strong focus alongside the continuation of forest horticulture.

The trade in timber, harakeke, taewa, and other plant products with Europeans also changed the political milieu of forest land use through warfare, a trend that would

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[138] Fleet, "Forests", 25.
[139] McNab, *Tasman to Marsden*, 110.
[140] Fleet, "Forests", 25-26; Middleton, "Landscapes", 114.
[141] Middleton, "Landscapes," 116.
[142] Fleet, "Forests," 29; Phillipson, "Bay of Islands," 63.

continue to dominate the indigenous landscape throughout the nineteenth century. Among the most valuable items that tangata whenua tended to trade for forest resources were "weapons and ornaments", mainly muskets.[143] Ngāpuhi were the first to trade forest resources for muskets, trading taewa and harakeke for weaponry some time prior to 1805; this was followed by a series of raids on Ngāti Pukeko and Ngāti Awa, who fled to Te Urewera and subsequently cleared land for subsistence agriculture.[144] Ngāpuhi sought to further cultivate conquered land, establishing villages on the edge of the forest at Te Puna in order to acquire more resources for use in trade.[145] This effectively cemented the "escalation of warfare" on the Māori political stage of the 1810s and 1820s: "offence and retribution were an integral part of daily life, and where slaves from conquered tribes provided labour for the agricultural produce traded for further muskets."[146] Throughout the next two decades, similar warfare was documented between Rangitāne and Ngāti Apa based on harakeke and taewa cultivation in Manawatu, resulting in significant territorial changes. Cultivated forest resources also played a more direct role in provoking conflict, such as the "feast of the pumpkins", an incident wherein Te Rauparaha ambushed several local rangatira - including Mahuri and Te Aweawe of Rangitāne - using the prospect of European plant resources as a lure.[147] This had an unprecedented effect on Aotearoa's forests and their uses. Deforestation and afforestation by Māori, for example, increased significantly. The displacement of a large number of people led to hapū "being driven off to yet other land – probably to virgin forest which the group would then have no option but to clear", a situation that occurred in South Wairarapa with the displacement of Rangitāne and Ngāti Kahungunu northwards to Mahia, which was then cleared and cultivated with seasonal crops.[148] In other areas, the resulting effects of depopulation through the increase in warfare also affected traditional Māori uses of forest land, though this was generally less impactful to forests themselves. In South Wairarapa, habitation similarly tended towards ephemeral

[143] Middleton, "Landscapes", 117.
[144] Miles, "Te Urewera", 27-29.
[145] Middleton, "Landscapes", 118.
[146] Middleton, "Landscapes," 118.
[147] McEwen, "Rangitāne", 126-136.
[148] A. P. Vayda (1956). "Maori conquests in relation to the New Zealand environment." *Journal of the Polynesian Society* 65, no. 3, 209; Anderson et al., "Wairarapa ki Tararua," 12.

and seasonal settlement by hapū from surrounding areas, such as the temporary settlement of Wairarapa Moana and the Ruamahanga river valley by Ngāti Tama, Ngāti Rahiri, and Ngāti Tawhirikura following the exodus of Rangitāne and Ngāti Kahungunu in the 1820s.[149] The impacts that European trade brought upon systems of Māori land settlement, warfare, and cultivation resulted in major political and demographic changes in the usage of forest land by tangata whenua.

II: European forest land use, 1769-1840

Records of European forest resource use in Aotearoa begin with the first voyage of James Cook, wherein his men were recorded cutting wood to repair shipboards and for the manufacture of wooden utensils. The first forests that Cook's men interacted with in the North Island were coastal, low-lying areas dominated by kahikatea, tītoki, and pūriri, and Cook also records the presence of tī kōuka, New Zealand broom, harakeke, shore celery, and mangroves.[150] Kauri were also observed, and considered to be useful in aiding future colonial construction due to the volume of wood contained within them, though they were rarer and generally grew further from the shore.[151] Forests in the South Island were viewed similarly by Cook; tōtara forests in Queen Charlotte Sound, for instance, were recorded as "excellent timber, fit for all purposes except Ships' Masts, for which use it is too hard and heavy."[152] While Cook's interactions with New Zealand forests were fleeting, his attitude was one of deliberate exploitation with a view to colonisation, as he states in his summary of findings.[153] Such an attitude would remain prevalent in early European accounts of New Zealand forests, though their actions remained limited.

The other significant European account of Aotearoa's forest resources during this early exploratory period is that of Ambroise du Clesmeur, who wrote a more detailed account

[149] Anderson et al., "Wairarapa ki Tararua," 13.
[150] James Cook (1893). *Captain Cook's Journal during his First Voyage Round the World made in H.M. Bark 'Endeavour,' 1768-71.* London: Elliot Stock, 142-152; A. P. Druce (1983). *Indigenous Higher Plants (Ferns, Gymnosperms, Flowering Plants) of Anaura Bay Scenic Reserve.* Wellington: New Zealand Plant Conservation Network, 1-3.
[151] Cook, 159.
[152] Cook, 192.
[153] Cook, 218.

of New Zealand flora in a diary associated with Marion du Fresne's 1771-72 expedition. du Clesmeur's account of kauri wood in the Bay of Islands shows a similar preoccupation with the usefulness of timber to future European colonists: "*de tous les bois que nous y avons vus, l'espèce la plus avantageuse pour la marine est sans contredit, celle dont nous coupâmes des mâts.*"[154] du Clesmeur emphasises the fertility of soils in the area as a means of assessing a colony's ability to thrive. Similar to Cook's diary, notes were also taken on the culinary and medicinal uses of forest plants, including various types of myrtle, shore celery, and ferns; the possibility of exploiting the "*grande ressource*" of native birds was also explored.[155]

Voyages from these points onward, up until the early 1810s, were characterised by their searches for information surrounding the resources that could be gained from this new territory, punctuated by brief attempts at forming mercantile networks involving harakeke and kauri timber trading.[156] According to Wigglesworth, wide-scale exploitation of New Zealand forest land resources during this time was prevented by the perceived low rate of return that merchants would garner from timber and flax trading: "timber and flax cargoes often appear to have been taken as a side-line to the main purpose of a voyage ... timber and flax, however, could not provide the returns that were available in the luxury Pacific trades."[157] While there were certainly voyages that aimed mainly to exploit the rich forest resources that Cook had described – such as the cargo ships *Fancy* and *Hunter*, and the vessels *Recherche* and *Esperance*[158] – there remained no widespread continuation of efforts at forest land management until at least 1810.

Early attempts at dedicated land clearance for the purpose of resource control and settlement first occurred from 1810 to 1818. Such an increase in demand for forest resources roughly corresponds to a period of rapid economic growth in Australia, as well

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[154] A. du Clesmeur quoted in R. McNab (1914). *Historical Records of* New Zealand. Wellington: John Mackay, 469-470. *(Of all the woods that we've seen, the most beneficial species for sailing must be, without a doubt, the one from which we cut spars.)*

[155] Du Clesmeur, 470-478.

[156] Wigglesworth, 9.

[157] Wigglesworth, 9.

[158] Wigglesworth, 4, 15-16; B. D. Cross (1914). "Investigations on Phormium." Masters thesis, University of Canterbury, 61.

as an "increasing involvement in the international economy."[159] Initially, two botanists were sent by Governor Lachlan Macquarie of New South Wales to Foveaux Strait to investigate the potential for long-term cultivation and farming of harakeke on forested land; this mission was unsuccessful.[160] More significant consignments of harakeke began following the voyage of the brig *Perseverance* to the Foveaux Strait in 1813. However, by the end of the decade, land clearance in the interest of harakeke cultivation had occurred in Southland to the extent that large-scale exportation of raw materials was regularly occurring, with the first record of this being in 1818.[161]

From 1810, proposals for the use of forest resources were put forward to the Church Missionary Society. Firstly, Samuel Marsden put forth a broad proposal for the permanent settlement of New Zealand and the exploitation of "the natural productions of these islands" with a view to trading them with merchants in Port Jackson.[162] This proposal received limited support among European traders due to its perceived high cost and low returns, according to Church Missionary Society Secretary Reverend Josiah Pratt; however, the acquisition by the Society of the cargo ship *Active* led to the regular establishment of trade, and, on a minor scale, missionary forestry, by 1814.[163] Specifically, Marsden's aims for settlement were, alongside religious motivations, to acquire "timber and other productions ... its fine timber for ship-building, its rosin, native flax, &c.," an aim that necessitated "exchange with the Natives" but also the establishment of European "soil or industry" in Aotearoa.[164] Such timber clearance partially depended on the labour of Māori, but also diplomacy between missionaries and tangata whenua, which was instrumental in securing regular and high-quality stocks of

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[159] R. V. Jackson (1977). *Australian Economic Development in the Nineteenth Century.* Canberra: Australian National University Press, 3.

[160] R. Carrick (1903). *Historical Records of New Zealand South.* Dunedin: Otago Daily Times Co., 77; Wigglesworth, 26.

[161] Carrick, 77.

[162] S. Marsden (1810). "The Necessity and Advantages of a Vessel under the Society's Controul," in Church Missionary Society (1853), *The Church Missionary Society Register, 1814-1853.* Sydney: Church Missionary Society, 264; Havard-Williams, F. *Marsden and the New Zealand Mission: Sixteen Letters* (Dunedin: University of Otago Press, 1961), 26.

[163] Marsden, 265-267; Wigglesworth, 43.

[164] Marsden, 266-269.

timber for trading.[165] The establishment of a mission station for dedicated forest clearance aided the Society in its diplomatic and economic efforts; this station was situated on "a parcel of land ... by admeasurement fifty acres" purchased shortly after the arrival of the *Active* in May 1815.[166] Marsden described the duties of the station's staff as "putting up the necessary Buildings ... collecting Timber to load the *Active* for her to bring to Port Jackson, and in Agriculture," as well as "Flax dressing".[167] Clearly, the collection of timber and flax were major objectives in the *Active*'s initial mission, as was their cultivation and exportation.

However, timber clearance by the *Active* and its successors was, while producing export quantities of wood, generally unprofitable; it was funded by the Church Missionary Society itself, rather than the proceeds from timber and flax trading.[168] This was, in part, due to the levies and tariffs imposed on timber exports from the Society's settlements. According to Marsden, levies amounted to "sixpence per solid foot," or roughly forty per cent of the total value of exported timber.[169] The spars acquired through the *Active*, as well, were generally substandard, "not longer than sixty-four or sixty-eight foot, when they should have been eighty foot."[170] This did not seem to diminish the value of the cargo significantly; however, the quality of the exported spars reflects the lack of a dedicated economic focus for the timber trading mission, as well as the inherent difficulties spar trading in Aotearoa presented.[171] Marsden expressed that, while timber felling, "the greatest part of this Voyage," failed to secure significant financial returns, the expenses incurred were insignificant compared to any potential "Revenue of the Colony," as well as the spiritual benefit of installing a Church Missionary

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165 H. McDonnell (2002). "The Rosanna Settlers". Unpublished manuscript, Wellington City Libraries, Wellington, New Zealand, 14.

166 Wigglesworth, 42.

167 Marsden, 482.

168 Wigglesworth, 44.

169 Letter from Samuel Marsden to Josiah Pratt, 28 October 1815. MS-0055/032, Trimble 32, CMS Number 97, Marsden Collection, Hocken Collections, University of Otago, Dunedin, New Zealand.

170 Marsden, 267; Wigglesworth, 44; McDonnell, 14.

171 G. A. Steward & A. E. Beveridge (2010). "A review of New Zealand kauri (Agathis australis (D.Don) Lindl.): its ecology, history, growth and potential for management for timber." *New Zealand Journal of Forestry Science* 40, no. 1, 47; Samuel Marsden, personal journal, 20 June 1815. MS-0055/004, Trimble 4, CMS Number 76, Marsden Collection, Hocken Collections, University of Otago, Dunedin, New Zealand.

Society outpost in New Zealand.[172] This would suggest a diplomatic and religious aim to these missions, rather than a concerted effort to establish dedicated forestry-based settlements; these were merely an accessory of missionary activity in the area.[173] Nonetheless, the Church Missionary Society's early attempts at forestry are significant in characterising forest land use during this early period; dedicated solely to forest clearance without afforestation by exotic woods, motivated at least partially by profit, and relatively small-scale.

Throughout the course of the following decade, the role of mercantilism in European forest land development became increasingly significant. In 1822, the merchant ship *Providence* landed at Hokianga; this mission was solely intended for trading kauri spars. Captain James Herd and his aide Reverend Thomas Kendall – who had previously worked aboard the *Active* with the Church Missionary Society – acquired a significant plot of land for this purpose.[174] Contemporary accounts from Ngāti Awa describe a mission by a European ship – likely a whaling vessel – landing near Whakatāne for the purposes of forest land clearance, possibly with a view to afforestation or pastoralism; however, the initial purpose of the mission appears to have been to gather rata, rimu, or kahikatea woods.[175] Consignments of harakeke, too, continued to grow in popularity in Australia, the United Kingdom, and France due to their use in rope manufacture.[176] Alongside these missions came land clearance and semi-permanent settlement by Europeans in these forested areas; this was generally limited to the Bay of Islands.[177] Timber and flax that was processed for use by Europeans was mainly exported to New South Wales, but also to the Americas and further afield, reflecting a high level of demand for New Zealand timber goods despite any perceived shortcomings.[178] These

[172] Marsden to Pratt, 28 October 1815.
[173] Letter from Samuel Marsden to Josiah Pratt, 3 March 1817. MS-0056/042, Trimble 42, CMS Number 60, Marsden Collection, Hocken Collections, University of Otago, Dunedin, New Zealand.
[174] McDonnell, 14.
[175] E. Johnston (2003). "Ohiwa Harbour: A Report Commissioned by the Waitangi Tribunal." Wai 894, A116, Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand, 81; McEwen, W. M. (1987). *Ecological Regions and Districts of New Zealand, no. 5, part 2.* Wellington: Department of Conservation, 36.
[176] Carrick, 78.
[177] Johnston, 83.
[178] McDonnell, 14-15.

developments can broadly be characterised as the beginnings of a "maritime trade web coalesced into a 'Tasman World'; an offshoot of a larger Australian 'Pacific Frontier,'" motivated by trading in forest and maritime goods, though this would only reach its peak in the 1830s.[179]

The most significant development in terms of New Zealand forest land use by Europeans at this time was the establishment of the first New Zealand Company in 1825. This company initially represented a "small colonising venture" commissioned by a number of London merchants, bankers, and aristocrats; however, by the end of that year, they had dispatched the barque *Rosanna* and the schooner *Lambton* to Tini Heke and then onwards to Rakiura by early 1826.[180] The ships carried civilian settlers, as well as a cargo of goods; these included flax machinery, seeds for afforestation and agriculture, and agricultural and forestry tools.[181] Throughout this early period, the Company's ships investigated a number of locations to prospect for timber and flax reserves; this occurred throughout the east coast of the North Island, but focused on the Hauraki Gulf, the Thames estuary, and Hokianga.[182] A number of excursions were launched to investigate Onehunga for its suitability for settlement; moreover, Herd and Kendall purchased islands in the Gulf, believing them to be rich in flax, timber, and iron-rich sands suitable for refining.[183] While land development did not occur during these excursions, the view of New Zealand forest land as a resource to be exploited is evident through the frequent purchases of land deemed "rich".[184] Moreover, in their subsequent voyage to Paihia, the settler ships were referred to mainly as "flax company's vessels" by missionaries; they are also referred to mainly using the value of the flax on board the ship.[185] The New Zealand Company's purchase of Hokianga in 1827 further exemplified

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179 M. Stevens & R. Standfield (2021). "'Picturing' Kāi Tahu in 1830s Poihākena: A Preliminary Sketch." *Te Karaka* 89, no. 1, 15.

180 McDonnell, 31-33.

181 "Advertisements." *Sydney Gazette*. March 6, 1827, 1-2; "Advertisements." *Sydney Gazette*. March 10, 1827, 1-2.

182 Wigglesworth, 60.

183 McDonnell, 67-70; Auckland Council Heritage Unit (2013). "Onehunga Heritage Survey Report." B-045-001, Alexander Turnbull Library, Wellington, New Zealand, 63; Mogford, J. C. (1977). *Onehunga: A Brief History*. Auckland: Onehunga Borough Council, 13.

184 McDonnell, 70.

185 McDonnell, 70.

the venture's aim as a timber and flax export company rather than purely as a settler mission. Thomas Kendall wrote in the terms of the purchase that the purchase should include "all the trees growing on the said piece or parcel of Land ... and the Appurtenances thereto together," a statement that is repeated throughout the transaction document.[186] According to later accounts, a number of the settlers aboard the Company missions to Hokianga chose to remain, "busily employed in cutting timber, sawing planks, and making oars for the Sydney market," an example of the strong economic focus of Company contractors.[187]

The diversification of colonial companies also occurred around this time, as the value of New Zealand spars and harakeke-derived products began to increase in the Sydney market. Among these companies was Cooper & Levey, a Sydney export speculation firm. With a view to importing spars and flax, the firm contracted a number of sawyers to "saw pine and spars" in Foveaux Strait in early 1826 aboard the brig *Elizabeth*; these were followed by a number of missions by their other vessels *Industry* and *Governor Macquarie*.[188] Similarly, another firm, Raine & Ramsay, were responsible for the contemporaneous establishment of a timber station in Hokianga; this produced a large quantity of timber, as well as the ships *Enterprise*, *New Zealander*, and *Sir George Murray*, becoming one of the earliest permanent timber stations in New Zealand.[189] This timber station – named Deptford by colonists – was not intended as a location from which agriculture could expand, unlike the earlier missionary settlements; instead, this was a "trading base" that was "supported by several of the most wealthy merchants of New South Wales," dedicated entirely to the production and export of forest resources.[190] These companies are broadly representative of the colonial timber industry from the mid-1820s into the 1830s; focused on colonial ventures with a purely economic target with regard to forest land use.

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[186] New Zealand Company deed of purchase, 26 January 1827. NZC38/1, New Zealand Missions 1818–1826, MS, ref. A407, Mitchell Library, New South Wales, Australia.

[187] A. A. Earle (1832). *Narrative of a Nine Months Residence in New Zealand, in 1827*. London: A & R Spottiswoode, 27-28.

[188] Wigglesworth, 64.

[189] Wigglesworth, 65-67.

[190] Earle, 26-27; Wigglesworth, 66-68.

As colonisation throughout the late 1820s and early 1830s began to diversify, with various European groups acting separately to each other, the views of colonists regarding forest land use began to diversify also. Significantly, the idea of conserving "wilderness" in Aotearoa began to arise among some settlers.[191] The horticulturalist Thomas Shepherd, one of the settlers aboard the *Rosanna*, took a number of notes on the economic potential of timber felling on Rakiura: "where the brook emptys its water ... is a convenient place for sawing timber, where there is a considerable quantity of fine trees growing."[192] Shepherd also alludes to the practical use of edible forest plants: "some Greens were found by some of our people, was cooked and were very tender."[193] Alongside these economically-minded observations on the potential for wide-scale timber felling, settler horticulture, and agriculture, however, were a number of remarks concerning the natural beauty of Rakiura: these include such lines as "deep glens fel from the high ground and are full of majestick trees ... the silvery water adds greatly to the beauty of the woods."[194] Shepherd also writes more extensive and poetic passages in this manner: "Weeping trees and rugged singular shaped rocks. The deepness of the glen, lofty weeping trees and the Noises of the water rushing down the rocks into smooth, clear, still water might well be called amongst landscape painters in the style sublime."[195] While Shepherd's former career as an academic horticulturalist and landscaper certainly influenced his choice to focus on the scenic resources of Rakiura, his emphasis on natural barriers as resources would later re-emerge among settlers in the Wellington Province.[196]

However, there also existed a significant opposition to views that generally appreciated the apparently undeveloped nature of the islands. Augustus Earle, an English artist who visited Deptford in 1827, describes the port in broadly economic terms: a "snug little colony" which "usefully employed" a number of sawyers and manufacturers in the

[191]McDonnell, 37.
[192]McDonnell, 37.
[193]McDonnell, 40.
[194]McDonnell, 35.
[195]McDonnell, 37.
[196]Shultis, "Improving the Wilderness", 125; Beattie, "Colonial Geographies of Settlement", 592.

processing and export of timber, shipping supplies, and ships.[197] Earle relates that the settlement consisted of "storehouses, dwelling-houses, and various offices for the mechanics"; his painted depictions of Deptford reflect this, showing a sparse set of warehouses and jetties overlooked by a clear-felled forest.[198] Earle's own perceptions of New Zealand forest land appear to have been informed quite heavily by colonists' ideas of economic availability; whereas Shepherd refers to New Zealand's trees as "majestick" and "grand", Earle tends to refer more to the impenetrability of the woods, "so thick that the light of Heaven could not penetrate the trees that composed it ... a mass of gigantic trees, straight and lofty, their wide spreading branches mingling over head, and producing throughout the forest an endless darkness and unbroken gloom."[199] These observations suggest a vaguely negative view of the "impenetrable" forest, especially with regard to how navigable it is to European colonists. Notably, Earle comments upon how tangata whenua can easily traverse forest land, whereas European settlers cannot; these comments have been accurately summarised as writings of "a society intent on both territorial and epistemological mastery of new lands."[200] Moreover, Earle displays Māori planting as an obstacle to European dominance in Hokianga, something which he argues contributes to a "toilsome journey through the forest" tolerated only by a "savage community".[201] Nonetheless, this view was not universal; the British Navy considered "resources ... heavily relied upon by Māoris" such as "fernroot and cultivated vegetables" and "forests with berry and bird resources" key to the further development of Hokianga settlements.[202] While Deptford and other Hokianga outposts would cease to operate on this level by 1833, their focus on clearing and direct timber exploitation would survive as the British government established settlements in the region.[203] This unconscious

[197]Earle, 25.

[198]Earle, 25; Watercolour painting entitled 'The Showrackki, commonly called Deptford Dock Yard, a ship building establishment, belonging to some Sydney merchants in the Shukeangha River, New Zealand', c. 1827, NK12/137, Rex Nan Kivell Collection, National Library of Australia, Canberra, Australia.

[199] Earle, 29-35.

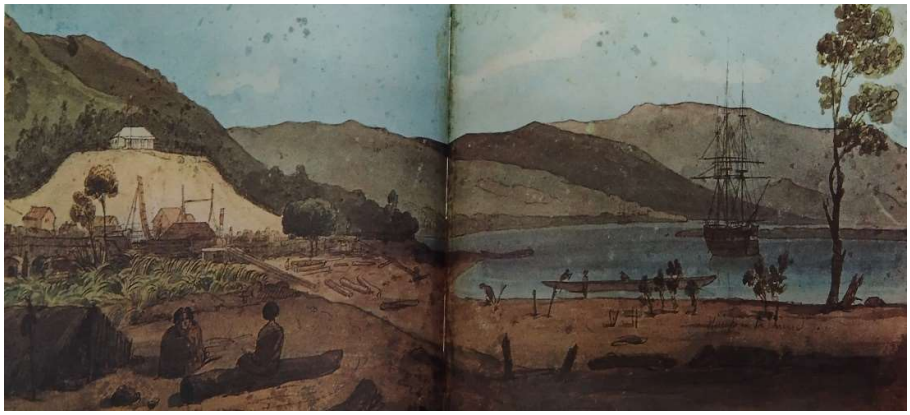
[200] I. Horrocks (2021). "Augustus Earle's pedestrian tour in New Zealand". In Comyn, S. and Fermanis, P. (eds.), *Worlding the south*. Manchester: Manchester University Press, 120.

[201] Earle, 38.

[202] K. Shawcross (1967). "Maoris of the Bay of Islands, 1769–1840: A Study of Changing Maori Responses to European Contact." Master's thesis, University of Auckland, 10.

[203] G. Park (2013). "Forestry and Timber Trading in the Bay of Islands, 1769-1840". Research paper, Treaty of Waitangi research unit, Victoria University of Wellington, 10.

opposition to early forest conservationism represents the explicit formation of an ideology that valued clear-felling by Europeans above the conservation of forest land; this debate would continue throughout the later period of colonisation.



A. Earle (1828). *The Showrackki, commonly called Deptford Dock Yard, a ship-building establishment, belonging to some Sydney merchants in the Skuheangha River, New Zealand.* Object 134515282, National Library of Australia Archives, Canberra, Australia.

By this time, forest clearance began to be undertaken by colonists for the purposes of agricultural development. This represented an expected but radical departure from the typical operations of land clearance for timber-gathering purposes and introduced unprecedented changes to indigenous forest land. In 1832, at the Church Missionary Society settlement at Waimate, for example, the acquisition of a 20-acre plot of bracken-laden scrubland was immediately followed by clearance, ploughing, and the plantation of staple European field-crops.[204] This change mainly occurred due to an agreement between Hongi Hika and Samuel Marsden, which resulted in land ownership transfers from Ngāi Tawake, Ngāti Maru, and Ngāti Rehia to missionary colonists for the purposes of wheat cultivation.[205] In the following years, however, similar agreements between iwi and missionaries would result in the expansion of forest land clearance for these purposes; around twenty-five blocks of mainly forested land were sold to missionaries, resulting in

[204] P. Bawden (1992). "The mechanic missionaries: were they effective?" In Glen, R. (ed.), *Mission and Moko: Aspects of the work of the Church Missionary Society in New Zealand, 1814-1882*. Christchurch: Latimer Fellowship, 52.

[205] G. Park (2006). "'The Enchanter's Wand': The Transformation of Whenua in pre-1840 Bay of Islands." Treaty Research Series, The Waitangi Tribunal, Wellington, New Zealand, 30.

the clearance of "over 2500 acres" of forest around Waimate by the end of 1834.[206] The wider use of forest land not for saw-milling or flax cultivation was a relatively new innovation in New Zealand's colonial landscape, preceded by the small-scale cultivation of maize in Auckland from 1827 and the cultivation of wheat crops in the Foveaux Strait from 1830.[207] With the introduction of forest clearance for agriculture, missionaries also introduced afforestation by exotic fruit trees and groundcover plants. Through the employment or supervision of the Church Missionary Society, Europeans sought to create viable crops of peaches, apples, and quinces, alongside vine fruits such as marrows; whether intentionally or not, dock, sorrel, and Scottish thistle also became widespread in northern New Zealand forests at this time, especially around Waimate, and would later become prevalent in the Wellington Province as European exploration advanced.[208] While the short-lived nature of the Waimate missionary farming project certainly lessened the scope of these impacts, these developments nonetheless represent the changing nature of European forest land use at this time, showing a shift from resource-gathering towards the clearance and afforestation of land for European-centred agriculture.[209]

In 1831, northern Rangatira petitioned the Crown for protection, resulting in limited British Crown involvement in the form of political intermediary British Resident James Busby from 1832 onwards. This colony did in fact rely on Māori labour for acquiring spars for naval ships, this time with a view to "monopoliz[ing] the Timber trade in the Bay of Islands, by purchasing the Timber from the Natives with Muskets and Powder, cutting it out, and selling it to the Shipping &c."[210] In practice, this involved a number of negotiations with rangatira and their iwi and hapū, such as Busby's 1833 address where he asserted "ka nui hoki te kai, ko reira hoki mahia ai he Muka, he Rākau, hei hokohoko mō te kaipuke," extolling the benefits of trading with the Crown.[211] While the

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[206] Park, 'Enchanted Wand', 31.
[207] R. P. Hargreaves (1963). "Changing Maori agriculture in pre-Waitangi New Zealand." *The Journal of the Polynesian Society* 72, no. 2, 108.
[208] Hargreaves, "Changing Maori Agriculture", 108-109.
[209] Park, 'The Enchanter's Wand', 32.
[210] Park, "Forestry and Timber Trading", 19.
[211] Park, "Forestry and Timber Trading", 11 ("*When there is a lot of food, men will work on flax, timber, and supplies for ships.*").

amount of permanent residents in each British colonial outpost is unclear – according to Fitzroy, no more than twelve, but according to Polack, "a considerable body" of British subjects – they were nonetheless enough to facilitate land and timber transactions across the Bay of Islands, especially with Busby's acknowledgement of rangatiratanga, and in spite of Fitzroy's concerns about unrest and anti-colonial sentiment among Māori.[212] These transactions typically consisted of a single British negotiator – a missionary or the proprietor of a timber outpost – and required a significant amount of land clearance to execute, as well as an established Crown dockyard or timber yard.[213] Joel Polack describes that "the proprietor of certain trees or forest land, arranges the price he has to receive in return for a single tree, or a number of trees [...] [the purchaser] furnishes the use of blocks, tackles &c required to drag the ponderous loads from the forest to the water."[214] Furthermore, workers cleared forest land for the sole purpose of timber transportation: "the nearest path, or that which presents the least obstacles is chosen, and the road is cleared of all small wood, and brush [...] small round pieces of timber being laid down as 'ways' for the spar to glide over."[215] As coastal reserves of forest declined during Busby's tenure as Resident, forest clearing of this nature became increasingly necessary; by the end of the 1830s, "no spars [...] were to be had" near the anchorages of any naval ship.[216] This represented the first full-scale mass clearance of forest land for colonial purposes; while Busby's policy was based on the "qualified dominion" of Māori, it also heavily relied on the large-scale cutting of spars to be economically viable, as did the numerous company and missionary outposts already present.[217] Busby sought to economically enhance colonial outposts in this manner through the formalisation of land ownership and transfer contracts between British and Māori.[218]

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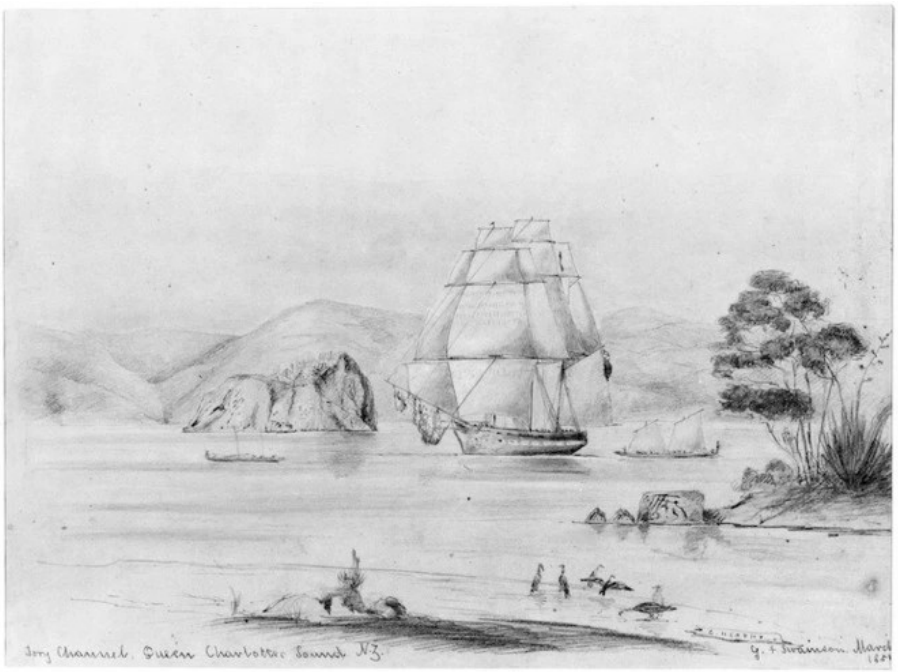
[212] Park, "Forestry and Timber Trading", 12; House of Commons, 1838, 165; J. Polack (1974). *New Zealand* no. II. London: Capper, 432.
[213] Park, "Forestry and Timber Trading", 18.
[214] J. Polack (1840). *Manners and Customs of the New Zealanders, with Notes corroborative of their Habits, Usages, &c., and Remarks to intending Emigrants, with numerous Cuts drawn on Wood,* no. I. London: J. Madden and Company, 168.
[215] Polack, *Customs*, 168-169.
[216] Park, "Forestry and Timber Trading", 20.
[217] Park, "Forestry and Timber Trading", 14.
[218] Park, "Forestry and Timber Trading", 12.

New Zealand Company-owned colonial outposts also seemed to benefit from formalised forest land treaties; however, they were not always observed to the extent that Busby had put forward. Wakefield, writing from 1838 to 1839, describes the Te Awaiti whaling outpost at Te-Koko-a-Kupe in the Marlborough Sounds as a place staffed by a number of carpenters and horticulturists, who had cleared the land without the "absolute disposal" of local iwi: "so uncertain [is] the right of ownership in land (which has been usurped by tribe after tribe during a series of wars), that a body of settlers might locate themselves without purchase in almost any part of the shores of the strait, unmolested by anybody."[219] While Wakefield alludes to some involvement by colonists with rangatira of Te Atiawa, Te Awaiti remained an "irregular colony" that did not conduct trade in the same manner as the missionaries or Crown colonists further north.[220] Forest land clearance in Te Awaiti appears to have been carried out, on a smaller scale, in much the same manner as in the Bay of Islands. While a number of small agricultural installations existed nearby, as well as "a grove of excellent trees for ship-building", the whalers' clearance of forest land was limited to that necessary for ship repairs and the creation of flat land for the station itself.[221] The Company whalers at Te Awaiti did, however, use the forest land for grazing livestock: "the smaller plants of the forest floor, mosses, ferns, small shrubs, and even the foliage of some trees were all very palatable to stock in the absence of adequate grassland pasture," an observation that can also be seen in the missionary colony at Waimate.[222] Furthermore, whalers used timber for the construction of wooden fences, spars, oars, and the interiors of houses; however, the houses themselves were constructed from vines and clay, minimising the actual use of timber for these purposes.[223] Forest land use by 1839, then, seems to have been relatively standard among the various European outposts in New Zealand; while there were considerable differences in bureaucracy, timber clearance was carried out as necessary for ship-building and repairs, as well as to gain profit from the thriving trans-

[219] J. Ward (1840). *Supplementary Information Relative to New Zealand*. London: Smith, Elder, & Co, 20.
[220] Ward, 21.
[221] Ward, 22.
[222] R. Caygill (1948). "The Te Awaiti Whaling Station: an essay on whaling in and around Cook Strait, New Zealand". Master's thesis, University of New Zealand, 42; Star, Forestry and Timber, 14.
[223] Caygill, "Te Awaiti", 24.

Tasman timber trade. Moreover, paths and clearings became increasingly common as efforts to thin the "impenetrable" forest continued.



C. Heaphy and G. F. Swainson (1839). *Tory Channel, Queen Charlotte's Sound, N. Z.* A-189-023, Alexander Turnbull Library, Wellington, New Zealand.

However, European forestry remained generally sparse during this time. In Palliser Bay, our case study, settlement was sporadic and temporary until the mid-1840s, well after the settlements of Te Koko-a-Kupe and Port Nicholson, which began in earnest in the late 1830s with the advent of whaling and forestry activities. Surveying of forest land did occur, though; Thomas Shepherd produced a number of coastal profile drawings of Cape Palliser in 1826, which include depictions of the vegetation in the area, though this does not necessarily signify an intent to exploit these resources.[224] Contemporaneously, Dumont d'Urville noted that Palliser Bay was "quite suitable for human habitation", though made no concrete recommendations for settlement.[225] More significant European

[224] Thomas Shepherd, drawings of coastal profiles on Cook Strait, 1826. MapColl-833aj/1826/Acc.17760, Alexander Turnbull Library, Wellington, New Zealand.

[225] P. Goldsmith (1996). "Rangahaua Whanui District 11a: Wairarapa (Working paper, first release)." Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand, 3.

incursions into Wairarapa forests commenced in 1839, when Charles Heaphy and Johann Dieffenbach surveyed the area around Turakirae and the Orongorongo River to check its suitability for settlement by the New Zealand Company. This expedition involved the capture and documentation of indigenous forest fauna, with a particular focus on huia.[226] According to Mair, the survey was immediately followed by the acquisition of large blocks of land in Wellington and Wairarapa by the Church Missionary Society under Wakefield, with a view to clearing and agricultural settlement; however, Goldsmith notes that the Wairarapa portion of the acquisition cannot be verified due to the vague nature of the agreement.[227] Mair concedes that, "during the period of land sales," the region between Turakirae and Wainuiomata remained disputed territory between a number of hapū as well as Europeans, limiting the amount of settlement that could occur by any party.[228] Aside from the precipitation of European crops and animals into the area through Māori trade, this seems to have been the extent of forest land manipulation by Europeans in this early period of pre-settlement in the southern Wairarapa region. The forest remained inaccessible due either to conflict, land use rights, or the location of the resources a large distance from established European settlements on the Cook Strait. These circumstances would change markedly over the following two decades.

[226] C. Heaphy "Notes on Port Nicholson and the Natives in 1839." *Transactions and Proceedings of the New Zealand Institute* 12, no. 1 (1879), 3.

[227] G. Mair (2020). "Māori Occupation in Wairarapa during the Protohistoric Period." In Leach, B. F. and Leach, H. (eds.), *Prehistoric Man in Palliser Bay.* Wellington: Museum of New Zealand Te Papa Tongarewa, 11-28; Goldsmith, "Wairarapa", 3.

[228] Mair, Protohistoric, 19.

Chapter II: Developments in the decade after Te Tiriti

From 1840 to 1850, European demand for land intensified with the introduction of "systematic colonisation" policies. Forested lands were increasingly seen as a barrier to development, a philosophy contrary to most Māori communities who sought to maintain both their land and traditional practices. The effect of these competing dynamics on the Wairarapa are examined in this chapter. European perspectives on forest resources are discussed first followed by an analysis of Māori responses.

I: European uses of forest land resources, 1840 to 1850

The signing of the Treaty of Waitangi in 1840 marked the beginning of a new wave of migration, and a new era in New Zealand colonial forest land manipulation. The Treaty of Waitangi essentially gave the British colonial government apparent authority over all land administration in New Zealand, as well as the exclusive right to purchase Māori land from iwi and hapū.[229] This had a number of immediate effects for European settlement: most importantly, the political union of land ownership across New Zealand would theoretically allow for the "systematic development" of new colonial outposts without the obstacle of land ownership disputes, which had stifled development on forest land throughout the earlier period. While land disputes undoubtedly continued, Crown pre-emption encouraged European development to occur at unprecedented rates, with the implication that land ownership could be more effectively clarified through colonial apparatuses.[230] Dedicated settlement efforts by the British crown and the New Zealand Company – which had been reformed in 1838 – resulted in a marked increase in settlement by European civilian colonists, mainly for the reasons of establishing "'concentrated' agricultural settlements" through a system of colonisation based on principles outlined by Wakefield.[231] Attitudes toward development shifted towards active attempts to "subdue" the land: forests were characterised as "waiting for the reception of man", "eligible for the settlement of industrious families of the humbler

[229] C. L. McBean "Ranger: The Evolution of the Role of a Protected Resource Manager." Masters thesis, University of Lincoln, 28.

[230] McBean, "Ranger", 29; Caygill, "Te Awaiti", 16; McGlone, M. (2022). "Science, policy, and sustainable indigenous forestry in New Zealand." *New Zealand Journal of Forestry Science* 52, no. 8, 5.

[231] M. Radzevicius (2011). "England Elsewhere: Edward Gibbon Wakefield and an Imperial Utopian Dream." Ph. D. thesis, University of Adelaide, 136.

classes, intending to earn their subsistence by cultivation of the soil," and "peculiarly rich ... [which] might be brought to produce grasses of every description."[232] From 1840 to 1842, the New Zealand Company established dedicated agricultural settlements in Wellington, Whanganui, New Plymouth, Nelson, and Hokianga; moreover, milling activities in more isolated locations on leased Māori territories increased significantly as European migration rates continued to rise.[233]

The New Zealand Company's policy of "systematic development" after 1840 resulted in several impacts to forests, especially around Cook Strait. Wakefield was instructed that the settler ship *Tory*'s mission was to include obtaining "general information relating to navigation, geography, geology, botany, zoology" in areas that were to be developed, as well as exploiting the natural resources of the region.[234] Settlements and land purchases were to be chosen according to their "facility of access ... fertile soil, water-communication with districts abounding in flax and timber, and falls of water for the purpose of mills".[235] After land was purchased, there now existed a loose form of forestry regulation through the distribution of licenses, something that Wakefield would endorse in 1847.[236] This view to the establishment of European timber and pastoral agriculture manifested itself in the widespread deforestation of newly-settled regions, alongside their afforestation by European exotic plants. In Otago, for instance, deforestation around Sawyers Bay had, by 1847, resulted in a significant "dearth of timber" which, in turn, "had begun to have a direct bearing on land settlement and usage".[237] This deforestation was also noted in 1843 by Dieffenbach, who noted that soil erosion had increased in the region as a result of tree root removal; in 1844, he remarked that the "degradation" of "elevated portions of the land" was affecting the

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[232] J. Beattie (2003). "Environmental Anxiety in New Zealand, 1840-1941: Climate Change, Soil Erosion, Sand Drift, Flooding and Forest Conservation". *Environment and History* 9, no. 4, 380; J. Ward (1840). *Information Relative to New Zealand compiled for the use of Colonists* (4th edition). J. W. Parker: London, 23-24.

[233] McBean, "Ranger", 29; McGlone, "Sustainable Indigenous Forestry," 5.

[234] Ward, *Information*, 125.

[235] Ward, *Information*, 125.

[236] J. Beattie, (2021). "Fashioning a future, part II: Romanticism and conservation in the European colonisation of Otago, 1840–60." *International Review of Environmental History* 7, no. 2, 107.

[237] Beattie, "Fashioning a future," 107.

geological structure of the soil, though this process also occurs naturally.[238] Surveyors, similarly, noted that the soil around the mouth of the Waimakariri River was affected by the burning and removal of forest and groundcover by Company settlers by this time; timber had become a scarce commodity around the settlements of Port Cooper and New Edinburgh, and settlement was characterised as borderline unsustainable due both to the infertility and instability of cleared forest land and its soils, and the scarcity of timber resources.[239] Forest land scarcity, then, had already begun to impact European development in the area by 1847, stifling pastoral and agricultural settlement in many regions by the end of the decade.

The progression of these early incursions into dedicated, permanent European settlement in the New Zealand forest can be exemplified by the various expeditions and attempts at colonisation in the South Wairarapa during this decade. Whereas Heaphy and Dieffenbach had "locate[d] the Wairarapa" in 1839, surveying this area would take another few months. From October to November 1840, prospector William Deans entered Palliser Bay alongside Dieffenbach in order to ascertain its suitability for settlement; he reported that it was "free from timber, and covered with tolerable herbage", though he would later revise these statements, stating in December 1840 that the land was "moderately wooded" upon examining the land "more minutely".[240] Dieffenbach reported the presence of a "very open" stretch of beech forest alongside aruhe scrubland and burned forest areas throughout the Bay.[241] At the same time, Lieutenant Abel Best surveyed the region, reporting a waterway "superior to the Wanganui River" and the presence of "well-forested land".[242] These surveys were undertaken not for the purposes of forest clearance, but rather for the establishment of cattle and sheep grazing areas in already-burned land; however, it is important to note that Best anticipated the

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[238] Beattie, "Anxiety", 381; E. Dieffenbach (1843). *Travels in New Zealand, with Contributions to the Geography, Geology, Botany, and Natural History of That Country*, no. I. London: John Murray, 257-298; T. M. Hocken (1898). *Contributions to the Early History of New Zealand: Settlement of Otago.* London: Sampson, Low, Marston, & Co., 258.

[239] Hocken, *Otago*, 237-238.

[240] J Deans et al. (1937). *Pioneers of Canterbury: Deans Letters, 1840-1854.* Wellington: Reed, 29; *New Zealand Gazette and Wellington Spectator*, 19 December 1840, 2.

[241] E. Dieffenbach "To the editor of the 'New Zealand Gazette'". *New Zealand Gazette and Wellington Spectator*, 12 September 1840, 3.

[242] *New Zealand Gazette and Wellington Spectator,* 2 October 1841, 2.

widespread introduction of the timber industry to Palliser Bay within "a very few years" due to the economic importance of industrial forest management, the suitability of the land, and the prospect of future purchases.[243]

The next group of Europeans to survey the Wairarapa region was led by Robert Stokes and Ngāti Rangatahi guides in November 1841, who mainly sought to ascertain a route through the heavily-forested Remutaka range that could potentially be cleared for overland access from Port Nicholson northwards.[244] This southern route likely intersected the area previously explored by Dieffenbach, which was a forested flat area between the Hutt and Pakuratahi rivers; the route through the mountains, notably, remained entirely forested, "marked only by the half-broken branches of shrubs" due to the sporadic nature of settlement in the region since 1819.[245] Stokes's report also indicates a desire for the scrubland in South Wairarapa to remain "in its native state"; this is not representative of a conservationist ethos, but instead displays the perception that the scrubland in Wairarapa was already suitable for cattle grazing.[246] Stokes reinforced this ethos of exploitation later in the report, proposing that a timber industry be established in the colonisation of the region and claiming that the land around the Ruamahanga River provided "sections, of land of the best description, that may be brought under cultivation at the least possible expence [*sic*], with sufficient and not more than sufficient valuable timber ... with a harbour that will allow the produce to be sent to this Port."[247] Stokes also described the Remutaka and Tararua bush with a view to its eventual afforestation and redevelopment as European-style pasture land; he notes "large groves and belts of trees, ... chiefly tōtara, kaikatea, rimu, mataihi, and toha toha [*sic*], trees which are never found but in the best soil," something that would easily allow

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[243] Deans et al., *Pioneers*, 29; *New Zealand Gazette and Wellington Spectator*, 2 October 1841, 2.

[244] J. Cruden (2015). "The Wairarapa Wealthy in Public and Private, 1876-1913." Masters thesis, Victoria University of Wellington, 3; Bannister, "Early History," 4; *New Zealand Gazette and Wellington Spectator*, 29 December 1841, 2.

[245] *New Zealand Gazette and Wellington Spectator*, 29 December 1841, 2; K. R. Cairns, notes and research papers relating to the Wairarapa, c. 1971. 88-070, Alexander Turnbull Library, Wellington, New Zealand.

[246] Cruden, "Wairarapa Wealthy," 3; *New Zealand Gazette and Wellington Spectator*, 29 December 1841, 2; Bannister, "Early History", 4; E. Dieffenbach (1843). *Travels in New Zealand*. London: John Murray, 84-85.

[247] R. Stokes, "Report of the Expedition to Wairarapa." *New Zealand Gazette and Wellington Spectator*, 22 December 1841, 3.

for "ample pasturage for cattle" as colonisation continued.[248] Highlighting similar European desires for development within forested areas, the June 1842 expedition report of New Zealand Company surveyor Charles Kettle made recommendations for a dedicated road, unobstructed by the impenetrable "high bush" of the Wairarapa and its environs, throughout the Remutaka Range and from Manawatu Gorge southwards through Seventy Mile Bush.[249] Upon his return, forest clearance throughout the Remutaka mountain pass began with a view to road-building under the command of Charles Samuel Brees, who burned a road upwards of 60 kilometres in length from the Pakuratahi Forest to the northern foothills of the Remutaka Range, an endeavour that would be carried out from 1843 to 1847.[250]

S. C. Brees (1843). *Plain of the Ruamahanga, opening into Palliser Bay near Wellington* [detail]. PUBL-0011-08, Alexander Turnbull Library, Wellington, New Zealand.

During this time, however, there were also several unofficial European incursions into the Palliser Bay area, and its forests, originating from the burgeoning whaling, fishing, pastoral, and pig-hunting industries in the region. Among these operations were settlements owned by the Catholic settlers Clifford, Vavasour, Petre, and Weld, alongside a number of other illegal leaseholders, who apparently "had become tired of

[248] R. Stokes "Report of the Expedition to Wairarapa." *New Zealand Gazette and Wellington Spectator*, 18 December 1841, 2.

[249] T. Walzl (n.d.) "Akatarawa and Pakuratahi Forests History." Unpublished manuscript, Greater Wellington Regional Council, 8-9.

[250] Bannister, "Early History", 5-6; Cruden, "Wairarapa Wealthy," 3-4; Walzl, "Akatarawa," 8-9.

waiting for the Government or the New Zealand Company to arrange the purchase of land".[251] In 1844, for example, Frederick Weld, attracted to the region by sheep-farming speculators, negotiated the purchase of a section along the Ruamahanga, a small part of Charles Clifford's 30,000 acre 'estate' Wharekaka.[252] This section would have, at the time, encompassed "magnificent grazing land," albeit covered with light native forest, swamp and scrubland - "occasional patches of fine wood" - that must be cleared for intensive pastoralism to occur.[253] Weld interacted with 'his' section of land by immediately seeking to stock the new settlement with food; a path already existed between Wharekaka and the harbour of Te Kopi, a Māori settlement and occasional whaling station operated by Ward.[254] Forest clearance at Wharekaka had begun with the construction of a dedicated homestead paid for by Vavasour at some earlier date, which was constructed by tangata whenua. Ward's use of forest land consisted of a variety of activities; primarily, the hunting of kererū, whio, and, later, pigs, as well as minor cultivations of turnips and potatoes within pastoral land.[255] The land often remained relatively untouched by clear-cutting or burning, in addition; Cruden asserts that the first major works involving forest clearance on the occupied land commenced in 1858, around a decade and a half after the initial Catholic settlements. Weld ascribes this to the harsh conditions present in Wharekaka, though Bidwill - another notable squatter - notes that land was deliberately left undeveloped until it became unprofitable not to increase sheep stock numbers.[256] Small-scale cultivation and pastoral activities were typical of the Wairarapa squatters, then, until 1853, when Crown purchases of land in the region became standard.

Wairarapa squatters appear also to have been interested in forest-based mahinga kai practices, albeit on an ephemeral and temporary basis while European settlement

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[251] Goldsmith, "Rangahaua Whanui," 4.

[252] J. Williams (1977) "Pastoralist and Maoris: Frederick Weld at Wharekaka." *New Zealand Journal of History* 11, no. 1, 29.

[253] Cruden, "Wairarapa Wealthy," 22; A. D. W. Best (1966). *The Journal of Ensign Best*. Wellington: R. E. Owen, 269.

[254] Goldsmith, "Rangahaua Whanui," 5.

[255] A. Lovat (1914). *The life of Sir Frederick Weld, GCMG: a pioneer of Empire.* London: John Murray, 26-29.

[256] Lovat, "Weld," 30-31; W. E. Bidwill and E. Woodhouse (1927) *Bidwill of Pihautea: The Life of Charles Robert Bidwill*. Christchurch: Coulls Somerville Wilkie, 9-11.

remained scarce. On an excursion to Rangiwhakaoma, a coastal settlement on the edge of low bush, Wharaurangi, a pā located near Flat Point, and Whareama, a settlement situated between bush and swampland, Weld reported learning about mānuka and karaka cultivation, as well as pig runs situated within the bush and swampland.[257] Weld's writings, alongside those of other squatters, place a great deal of emphasis on the necessity of learning such practices in order to increase the "efficacy" of their settlement in the region; Williams writes that Weld believed "he had evolved a successful policy for dealing with the native New Zealander" through a combination of careful economic negotiation as well as cultural discourse.[258] The underlying reasons for squatters' interests in Māori practices do not represent, necessarily, any genuine interest in the long-term continuation of indigenous-styled forest land management, however. Lessees at Palliser Bay were likely concerned mainly with short-term techniques for the purposes of survival on their sparsely-cultivated lots, as they were in the early period of their settlement in the area. Best, for example, writes on the value of "large Grubs ... cut out of the Puridi [*sic*] tree," not as a viable long-term solution for nutrition, but largely as a means of learning Māori techniques for forest habitation.[259] Wairarapa settlers, especially, were "often benighted in the bush and at best had the doubtful accommodation of a native hut," according to missionary William Colenso.[260] Towards the northern and western parts of the valley, groups of European settlers were documented as early as 1841 accompanying Māori employees into the bush for illegal forest clearance and afforestation purposes; especially at this point in the settlement of Wairarapa, this would certainly have necessitated some acquisition of matauranga Māori regarding use of forest resources.[261]

Moreover, the squatters were concerned with superficial cultural discourse as a means of appeasing their Ngāti Kahungunu landlords from whom their pastures were leased. Native Land Purchase Commissioner Donald McLean alluded to the fact, in an 1851

[257] Williams, "Weld," 36.
[258] Williams, "Weld," 36.
[259] Best, *Journal*, 327.
[260] W. Dinwiddie (1916). *Old Hawke's Bay, Colenso's Journals, The Early Settlers*. Napier: Dinwiddie, Walker, & Co., p. 18.
[261] Dinwiddie, *Old Hawke's Bay*, 23.

condemnation of squatters, that cultural assimilation to any extent was a major advantage in securing cheap and wide tracts of leased land throughout the district for many settlers (as well as lessees from Ngāti Kahungunu): "these rents obtained without much care or labour are injudiciously expended, and the greatest recipients ... render the position of the settlers holding land under them not only disagreeable and precarious, but in every way repugnant to the independent feelings of an Englishman."[262] Such statements reveal a "steadily growing awareness of the considerable gulf between a Māori and an English outlook," a factor that many squatters sought to avoid through increased knowledge of Māori land management systems, in part.[263] An in-depth knowledge of Ngāti Kahungunu's cultural justice system was also of importance to lessees in Wairarapa, owing to the differences in property rights and liability for injuries and losses incurred on one's property; Weld noted that navigating this system was crucial to maintaining stable relationships with his landlords, in turn stabilising his habitation in the area.[264] By the end of 1845, there were at least twelve documented European settlements in the Palliser Bay area, and William Colenso noted these stations could each have a population of up to forty, extending the necessity of this cultural influence in a local sense.[265] While the overall influence of mahinga kai and traditional forestry education on the Wairarapa lessees may have been brief and local, with leasing mainly being circumvented after 1846 measures to alienate Māori landlords and McLean's purchases thereafter, it is nonetheless valuable to examine their short-term effects on early European settlers in the Palliser Bay area.[266]

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[262] *Appendix to the Journal of the House of Representatives* 1862, session 1, C-1, no. 6.
[263] Williams, "Weld," 37; Goldsmith, "Rangahaua Whanui," 7.
[264] Williams, "Weld," 37; Lovat, *Weld*, 93; Cruden, "Wairarapa Wealthy," 23.
[265] William Colenso to Church Missionary Society secretaries, 18 June 1846. Microfilm 79-286/356. Series CN/M, Item 24, University of Auckland Library Special Collections.
[266] Goldsmith, "Rangahaua Whanui," 7.

W. Bannister (date unknown). *Plan of the Wairarapa valley &c.* MapColl-832.4a/[ca.1845]/Acc.2739, Alexander Turnbull Library, Wellington, New Zealand.[267]

1846 saw the introduction of several Crown political actions tied to forest land use management, partially because of unauthorised leasing. The incumbent governor, George Grey, sought to systematically eliminate the makeshift system of unauthorised leases in favour of governmental control over land distribution. Throughout the previous decade, Grey had been working with his superior Earl Grey to create "considerable disposable Demesne" of 'waste land' in New Zealand, wherein the Crown could seize land for agricultural and forestry development without any exchange of goods.[268] Moreover, Grey was interested in controlling tangata whenua and their connection to the land; by potentially limiting leases and purchasing rights to Government actions only, "refusing to purchase any lands from those who conducted themselves improperly, and in whose intentions of surrendering their lands, no confidence could be placed" could be more easily achieved, an action that would force Māori to undergo further land-based subjugation.[269]

[267] While this map is officially dated to 1845, the validity of this claim is doubtful at best (see Patterson, B. R. (1998). "The Pre-1865 Wairarapa Land Surveys." Wai 863, A001, Waitangi Tribunal, Wellington, New Zealand, 5-6). It is more likely that this map was either produced later – after the 1849 'sketch survey' conducted by Smith – or, if it was produced in 1845, it is not directly representative of the actual geography of the region.

[268] B. Rigby (1992). "Empire on the Cheap: Crown Policies and Purchases in Muriwhenua, 1840-1850". Report commissioned by the Waitangi Tribunal, 57.

[269] Anderson, "Wairarapa ki Tararua," 50;

This ordinance – the Native Land Purchase Ordinance, introduced on 16 November 1846 – limited the ability of squatters to cut "timber or other trees" without a license on Māori land, which, in practice, allowed them only to cultivate the timber, crops, and animals that were "absolutely necessary for the station"[270] Additionally, "the disposal of land" by the Crown allowed settlers to claim any piece of "waste land" - land unaffected by European-style agriculture or forest management – as part of the colony, alienated entirely from Māori interests.[271] Such land use policy was generally welcomed by squatters and settlers, despite the additional barriers to land leasing; Weld wrote, prior to the introduction of the Ordinance, that he welcomed the day:

> when a firm & just policy protecting alike the European & the native would render the beautiful but yet almost uncultivated valley below me a scene of happiness and prosperous content to the semi-civilized Maori as well as to the stout emigrant from the fair fields of Merrie England.[272]

Likewise, at a public policy meeting in Port Nicholson, European attendees were:

> fully impressed with the importance of the vast tracts of country fit only for pastoral purposes, being made available to the colonists as speedily as possible, although they felt if the present irregular practice of taking leases from the natives were much longer continued ... great and serious obstacles would be placed in the way of systematic colonisation of these Islands.[273]

However, there remained opposition to the Ordinance among squatters. Land ownership transfer would likely result in lower amounts of trade between squatters and Māori, and this would make it difficult, in the absence of a large settlement in the region, to sustain the operation of a station. Māori landowners were also opposed to the Ordinance on this basis, creating an obstacle in the enforcement of this law.[274] Further opposition arose when the Canterbury Association elected not to build their proposed settlement in the

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[270] Native Land Purchase Ordinance, 1846; "Public Meeting," *New Zealand Spectator and Cook's Strait Guardian,* April 11, 1846, 2.

[271] A. Johnston (2019). "To New Zealand for Land: The Timber Industry, Land Law, and Māori Dispossession in Nineteenth-Century New Zealand." *Graduate History Review* 8, no. 1, 66; Native Land Purchase Ordinance, 1846.

[272] Williams, "Weld," 49.

[273] "Public Meeting," *New Zealand Spectator and Cook's Strait Guardian,* April 11, 1846, 2.

[274] J. Hippolite (1991) "Wairoa ki Wairarapa: An Overview Report, commissioned by the Waitangi Tribunal." Wai 863, A003, Waitangi Tribunal, Wellington, New Zealand, 21-22.

Valley, further alienating squatters from the Crown's goal of land acquisition.[275] While it is clear that the transfer of ownership of reserved "waste land" by the Crown was a popular and highly-anticipated event to many European squatters, purchase negotiations between the Crown, squatters, and iwi were drawn-out and could not fully come to fruition until later decades, despite the 1849 order to the Native Land Commissioner to systematically dismantle the system.[276] At the centre of the opposition to enforcing the Ordinance were Thomas and John Purvis Russell, who maintained a direct correspondence with McLean throughout the period; Thomas Russell likely had an effect on delaying enforcement, writing in 1853 that he suggest McLean amend "a report ... that [he] had despatched to William Fox" concerning land usage.[277] In fact, Russell's land tenure suffered no major disruptions throughout the 1840s, regardless of the Crown's supposed efforts; a common situation among squatters who remained in the district.[278] The system of squatting on forest land continued to 1853, with Donald McLean's negotiations in the Wairarapa resulting in new deeds being drawn up among all remaining stations.[279]

Towards the end of the decade, European settler governments in their various forms became responsible for the production of trigonometrically-accurate maps of the South Wairarapa district, documenting a number of situations pertinent to colonists' interactions with the forest in the region. The first map to be produced in this manner was likely that of Kettle's, in 1842; this chart depicts Kettle's journey southwards from the Manawatu Gorge towards Wairarapa Moana, documenting forest land, mountains, plains, natural resources, and the ability of terrain to be easily traversed.[280] While the original version of this chart is no longer in existence, Whitehead's stylised reproduction of the map, made in 1848, serves as a more-or-less adequate replacement, despite its

[275] Hippolite, "Wairoa," 21.
[276] Hippolite, "Wairoa," 21, 27.
[277] Letter from Thomas Purvis Russell to Donald McLean, 31 December 1853. MS-Papers-0032-0054, Alexander Turnbull Library, Wellington, New Zealand; Goldsmith, "Rangahaua Whanui," 7.
[278] Williams, "Weld," 43; Anderson, "Wairarapa ki Tararua," 140.
[279] Hippolite, "Wairoa," 21-27.
[280] C. H. Kettle (1842), *Chart of the Country between Manawatu and Port Nicholson, Comprising the Wairarapa Valley, New Zealand* (in A. Whitehead (1848), *A Treatise on Practical Surveying*). See Appendix I.

inaccuracies.[281] The most significant feature on the map is the cleared path that Kettle and his companions used to travel through the forest; in places where this path was not available to use, Kettle notes "navigable by canoe," highlighting the necessity of local knowledge of the region to prospective settlers. Alongside this, Kettle pays especially close attention to resources that may serve future colonists. Forests are typically referred to by the type of tree dominant within them ("forest of tōtara," "tōtara rimu"); when that data is not used, he refers to the landforms beneath the trees ("fine level ... land," "undulating land," "fine valley"), implying that he is concerned with settlers‘ access to these resources as well as the timber itself. Where these words are not used, Kettle simply notes trees visually on the map, showing an abundance of forest to the north, medium timber and fernland from Pā Tupuahuruhuru towards the source of the Waiohine. The final detail that Kettle emphasises is the presence of animal life that may aid in settling the forests of the Wairarapa: an "abundance of wild pigs," and, in Wairarapa Moana and its tributaries, an "abundance of freshwater fish," serving as a documentation of the natural stocks of the district. While this map is essentially fragmentary, it nonetheless demonstrates the priorities of European colonists; that forests existed to be exploited, that natural resources existed to be processed for their individual benefit, and that the layout of the forests themselves (including paths leading throughout) were crucial to the further settlement of the region.

Another map, of uncertain provenance, is also important to this study. It was produced by William Bannister, a land surveyor in Port Nicholson, at some point during the early settlement of Wairarapa by squatters and early European landholders; however, scholars such as Patterson have theorised that European surveyors did not begin to accurately describe the district until at least Smith’s survey of 1849, an event that was noted by both squatters and Māori landowners.[282] At a glance, many features have been evidently copied from an Kettle, however, perhaps indicating an authentic date of 1845, albeit reducing this map to a form of plagiarism. This chart, then, may have been used in later attempts to assert land claims in the area pre-dating the establishment of land courts, or

[281] Patterson, "Land Purchase Surveys," 4.
[282] Patterson, "Land Purchase Surveys," 7; W. Bannister (date unknown). *Plan of the Wairarapa valley &c*. See Appendix I.

perhaps simply to illustrate the history of European settlement in the district. Nonetheless, its descriptions of forest land are valuable to understanding the values of colonists as they searched for land to settle or exploit. Bannister's chart extensively describes the quality and quantity of forest to a much greater extent than other maps, noting "a Quater [*sic*] of a mile wide Timber very fine" on the banks of the Ruamahanga, and commenting on the soil content underneath each piece of forest land ("soil very indifferent," "stony land Bad," "undulating," "Fine land well timbered"), implying that the forest will one day be removed for pastoralism. As with Kettle's probable original, Bannister also notes the type of timber available in each forest, as well as its availability to any potential settlers ("Tawa and Tōtara," "Tōtara," "thickly timbered," "very heavily timbered"). Paths leading throughout the forest – as well as river navigation paths for waka – are also noted on the map, though not as meticulously as Kettle's. The main difference between this map and Kettle's is its extensive notation of squatters and the locations of their homesteads (collectively, the "Ruamahanga Stations"), as well as the type of animals being raised in their pastures, reporting "cattle" and "good station for sheep or cattle," exemplifying the importance of settler pastoralism in the district to Europeans in the early phases of colonising the Wairarapa. Overall, Bannister's map – though it may be ultimately derivative, and poorly representative of the actual geography of the region – is an object that further displays the prevailing colonial ideology of forest land exploitation.

Later surveys would prove more detailed and more accurate, as well as serving to display the increasing cohesion of colonists' desires. A private survey by J. J. Dennan, commissioned to document the holdings of Bidwill at Pihautea, is particularly revealing.[283] Instead of clear-felling or burning most of the forest, a large amount of Pihautea's land continued to be taken up by seemingly permanent forest land; while fences separate sections of Bidwill's land, even in dense forest, features of the forest itself are clearly elucidated and appear immovable. Near Bidwill's homestead, for example, a small gap in the trees is marked "bight", a term usually reserved for

[283] J. J. Dennan (1849), *Plan of Pihautea Estate and Native lands in the occupation of C. R. Bidwill, Esq., Wairarapa*. See Appendix I.

permanent coastal landforms, implying that there remains some use to this geographical feature. More evidence for this usage of the forest for practical purposes can be seen nearby, where "gardens" are positioned neatly on the edge of the forest; this displays the extent to which Bidwill and his companions were likely observing Māori customs, especially within a context of illegal leasing. References to Māori culture are common on the chart, in fact; swamps and forest blocks are invariably referred to in Te Reo (Mangawhetu, Ngapuke, etc.), and Māori settlements on the edge of the bush are documented in the exact same manner as settler homesteads, with borders clearly marked between leaseholdings and "Native Lands".[284] The location of a large tutu shrub is also, curiously, noted on the map; while there are notable Māori uses of tutu such as flavouring aruhe, tutu is also highly toxic to livestock, pointing towards a pastorally-minded decision to include it on the map. There is little evidence that Bidwill and his surveyors intended for the preservation or conservation of forest land, Māori forest settlements, or any other feature present on the chart. The exact areas of individual land blocks are an incredibly prominent collection of marks on the map, implying their eventual sale to other parties. Moreover, it is a distinct possibility that forest and swamp lands are documented on the map with a view to their clearance or drainage at some point in the future.

William Mein Smith's 1849 chart of the region near Onoke displays many of the same traits, along with describing the exact conditions present on the land concerned.[285] Forests are, like on Dennan's map, referred to exclusively by their Māori names – Otapui, Okouru, etc. - and pā sites are well-documented. As with Bidwill, the inhabitants of the area – named as Kelly, Bowen, Drummond, and Bell, among others – tend to inhabit areas relatively close to the edges of the bush, with Māori settlements close by. This situation reflects the realities of small-area leaseholding at the time, and the necessity of cooperation with the Māori landlords of the district, as it does on Dennan's chart. Smith describes the content and extent of forest and shrubland with a focus on land occupation,

[284] In saying this, it is very probable that these ownership demarcations were added to the map at a later stage; this would reflect the use of "native lands court" on the chart, the court itself having been established in 1865.

[285] W. M. Smith (1849), *A Sketch of the Valley of Wairarapa and Ruamahanga*. See Appendix I.

or the potential for such, including "dwarf mānuka and other small shrubs" near the foothills of the Remutaka range, and "grass fern &c. up to the lower spurs" of the Aorangi range. Of more relevance is the way that Smith describes heavily wooded land itself. Instead of classifying the hills from Te Kopi to Cape Palliser using more neutral terms, as Kettle did ("level land but little subject to inundation," "Pā Pokokirikiri"), Smith describes it in terms of how the land could potentially be exploited: the land is "rough, hilly, useless country, the higher parts wooded," a statement on settlers' ability to use the land rather than the forest itself. Suitability for pastoralism is at the forefront of Smith's survey, a feature that it shares with Kettle's earlier chart, and something that can be inferred from Dennan's. These early attempts at charting the district, then, focus almost entirely on the ability of European colonists to purchase, settle, and clear the land of forests; while language is used that focuses on the Māori knowledge of the area, these are mere necessities to the survival of the squatters and landholders of the time, and not intended to be entirely permanent fixtures on the chart. Elements that were included on Smith's map, as Mair observes, were generally those "necessary for the Government's negotiations for land sales," although the chart retains features from the earlier "cursory surveys" such as vegetation density and terrain conditions.[286] As such, these maps can be considered representative of European colonists' attitudes towards forest land use in the South Wairarapa by the close of the decade.

Outside of the Wairarapa region, similar issues with land rights, squatters, and the use of forest land resources had also emerged. In 1841, Pākehā squatters at Mangonui, a small port that serviced the Northland kauri industry, reportedly chose to resort to clear-cutting and broadcast burning of kauri plantations within their leased claims rather than surrender them to the Crown for ownership assessment following the reinstatement of Government pre-emption.[287] Dieffenbach reported that these "settlers, doubtful of being able to maintain their claims to their immense purchases, have no other object than to clear the greatest possible amount of profit in the shortest time, even at the sacrifice of

[286] G. Mair (1972) "The Protohistoric Period of Wairarapa Culture History." Masters thesis, University of Otago, 130-131.

[287] P. Harris et al. (2010). "Summary of Wairarapa ki Tararua Tribunal Report for Rangitāne" (unpublished report), 15; Rigby, "Empire," 89.

a large and invaluable forest."[288] The losses incurred by broadcast burning or unmanaged clear-cutting were generally offset by the high price of kauri timber and gum, the costs "easily defrayed out of the Kauri saved from burning and waste."[289] Moreover, European forest speculators tended to offer extremely low rates of pay for kauri gum extraction by Māori, further causing uncertainty within the industry.[290] Forest land resource management in the upper North Island, or lack thereof, was further affected by the increasing amount of colonists in the region from 1840 onwards, creating a "hard necessity" for kauri timber and gum that far exceeded the capacity of the timber industry itself.[291] Exemplifying this, one property investor sold sixteen kauri plantations, totalling 1920 acres, for immediate clearance by new settlers at Kororareka in mid-1840, a contract that seemingly ignored land ownership laws after the Treaty.[292] While restrictions had been placed on kauri cutting and burning, these were seemingly not enforced until the end of this period around two years later, creating an environment wherein settlers were free to clear as much forest as deemed necessary during this time.[293] Any restrictions on land ownership, moreover, were generally relaxed with respect to kauri-focused settlers in northern New Zealand; Colonial Secretary Willoughby Shortland subtly announced, in January of 1842, that "all persons who have preferred their Claims before the Commissioners ... will be allowed to cut Kauri or other Timber on the Land claimed by them, without interruption by the Crown."[294]

The general effect of this speculation-fuelled clearance of kauri forest throughout the upper North Island, however brief, was a significant depletion of forest resources in the area, as well as the replacement of kauri forest with aruhe and low bush; Dieffenbach reported that "the kauri-land is so exhausted that scarcely anything will grow on it but fern and mānuka" as a direct result of "kauri-forest burning, not fired for the purpose of clearing the land, but in order to get a dozen or two of logs," as was observed at

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[288] Dieffenbach, "Travels," 228-229.
[289] D. E. Hutchins (1919). *New Zealand forestry*. Wellington: Department of Forestry, 69.
[290] Rigby, "Empire", 92.
[291] P. Thode (1983). "Northland's Forest History and Present Resources." *New Zealand Journal of Forestry* 28, no. 2, 205-206.
[292] W. Wilson. "Public Auction." *New Zealand Advertiser*, 23 July 1840, 1; Hutchins, *Forestry*, 69.
[293] Rigby, "Empire," 89-90.
[294] Shortland, W. "Proclamation." *New Zealand Herald*, 2 February 1842, 4.

Kororareka, Mangonui, and, later, Puhipuhi.[295] This practice was common throughout the entirety of the colony; however, opposition arose in some circles due to the effects on the soil, as well as the potential conditions on the land that would prevent dedicated pastoralism following such events. Moreover, several writers were concerned with the waste that occurred during the process. While the writer of a colonists' handbook in 1843, for example, noted that burning was a convenient method of clearing forest for limited pastoralism - "a small portion of the ashes and carbon will be left on the ground, which will produce one crop of grain" - there was nonetheless "an immense waste of useful matter" that discouraged use of the method, especially on short time-frames.[296] The burning of kauri forest, in particular, was looked upon negatively by colonial writers, though this did not significantly curb the amount that occurred. Dieffenbach, referencing the northern kauri forests, warned in 1840 that "a thick forest is not so easily converted into meadows"; similarly, a report of 1842 chastised Wellington-based farmers for recommending the burning of kauri on the basis that it "would present no land fit for agricultural purposes."[297] In 1841, as a result of the rapid destruction of northern forests, Hobson announced measures to protect kauri stocks in the interests of preserving them for naval purposes: "misuse of the forest" by unauthorised clearance was made illegal, a policy which was under discussion as early as 1840.[298] Although this early effort at kauri conservation was wholly ineffective – enforcement was essentially impossible due to a lack of policing, coupled with a widespread public opinion that kauri stocks were "inexhaustible" - it is nonetheless significant to the history of forest land resource management at the time.[299] While an attempt was made at forest inspections throughout the early years of kauri timber and gum speculation, these were intrinsically linked to the Royal Navy's desire for forest land resources, and proved neither intensive nor effective. Captain William Cornwallis Symonds, first official "conservator of Kowrie Forests," died soon after adopting the title, and his sole, unofficial successor, Naval

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[295] Dieffenbach, *Travels*, 228.

[296] "Impoverishing Effects of Burning New Land for the First Crop, from the *Colonial Farmer*." *Nelson Examiner*, 2 December 1843, 364.

[297] "The *Colonist." Nelson Examiner*, 17 December 1842, 163; E. Dieffenbach, "Description of the Chatham Islands." *Wellington Spectator*, 3 October 1840, 3.

[298] Rigby, "Empire," 83; Roche, "Historical Geography," 29.

[299] Roche, "Historical Geography," 29.

Inspector Thomas Laslett, did little but occasionally observe the clearance and burning of the northern forests until his last visit in 1843.[300] Subsequent colonial governments of New Zealand sought to introduce more rigorous timber licensing regulations. Grey's introduction of the Crown Lands Ordinance in late 1849, effective in 1850, created a system wherein, for a nominal fee, an investor could purchase a license that would allow them to exclusively clear timber – by cutting only – on a specified area of Crown-owned land.[301] This would represent the next step in economically-motivated timber resource conservation in kauri forests, but would not become fully effective until the later 1860s..[302]

Forest land use policy by European colonists was, by 1849, beginning to take shape as bureaucratic and political structures began to emerge. Propelled by Wakefield and others, the late 1840s saw the introduction of restrictions on logging and timber resource extraction, either to "ensure the supply of timber for future generations" or to appeal to the romanticism of green spaces.[303] For example, Wakefield's endorsement of licensing sawyers and loggers in Otago was motivated by "concerns" about the rate of resource usage; Chief Surveyor Charles Kettle, similarly, recommended that New Zealand Company loggers be prevented from accessing groves that were already being harvested by other groups, specifically Māori contractors.[304] Although these measures were not intended to preserve forest land in the long-term, other legislation was introduced for this purpose. The New Zealand Company, in its town plans, included town belts and wooded areas to "counter [cities'] artificiality and their inhabitants' poor health", representing an ideology wherein forested spaces could foster the physical well-being of colonists.[305] Dieffenbach contemporaneously proposed ideas of forest conservation and public health based on the theory that forested land produced climatically beneficial moisture and increased rainfall; this theory was used by individual politicians, such as

[300] M. M. Roche (1987). "Forest Conservation for Royal Navy Timber Supplies in New Zealand, 1840-1841". *Mariner's Mirror* 73, no. 3, 263.
[301] Roche, "Historical Geography," 30-32; "Advertisements." *The New Zealander*, 7 November 1849, 4.
[302] W. Boardman (1951). "The Trend of Forest Law." *New Zealand Journal of Forestry* 6, no. 3, 200.
[303] Beattie, "Fashioning a Future", 107; Beattie, "Colonial Geographies", 591.
[304] Beattie, "Fashioning a Future", 106-107.
[305] Beattie, "Colonial Geographies", 591.

Walter Mantell, to justify forest conservation locally during this period, emphasising that it could positively influence agricultural output.[306] This had the minor effect of forcing town planners and developers to maintain green and forested spaces in and around planned cities; in Wellington, the Town Belt represented a reserve land of this nature.[307] While the exploitation of forest land resources was not greatly affected by these restrictions, they nonetheless represent early legislative attempts to curb unchecked logging and deforestation.[308]

Another factor surrounding land use in New Zealand Company settlements was the prevailing doctrine of "systematic colonisation," introduced by Edward Gibbon Wakefield from 1839 to 1842. Wakefield had previously been involved in influencing colonisation policy in Adelaide, South Australia, and was concerned with creating economically and politically successful British colonies by balancing their perceived "excess of land in proportion to capital and labour"; that is, the centralisation of land by local government to ensure a steady supply of non-landholding workers for the colony, a policy that relied on high land values and the proceeds of land use being employed to fund further colony growth.[309] Wakefield and his chief surveyor William Mein Smith had a number of clear aims; chiefly, some semblance of land purchase consent was necessary following the signing of the Treaty; secondly, "ample reserves ... made for public purposes" and "a broad belt of public land" were to be created to maintain land sale prices and to ensure distance between proposed "town and country".[310] Conservation of the lowland forest around the settlement was also, less publicly, motivated by a desire to remove squatters, as well as preserving forest resource stocks for reasons of "systematic colonisation".[311]

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[306] Beattie, "Anxiety," 381; Beattie, "Fashioning a Future," 107; E. O'Gorman, J. Beattie, and M. Henry (2016). "Histories of climate, science, and colonization in Australia and New Zealand, 1800–1945." *WIREs Climate Change*, 7, no. 1, 899.

[307] "Advertisements." *Otago Daily Times*, 17 December 1866, 5; D. Moore (1998). "The Wellington Town Belt, 1839-1861." Wai 145, K003, Waitangi Tribunal, Wellington, New Zealand, 26.

[308] Cameron, "Indigenous Forests," 52.

[309] R. Bunker (1988). "Systematic colonization and town planning in Australia and New Zealand." *Planning Perspectives* 3, no. 1, 61.

[310] Bunker, "Systematic colonisation," 69; *New Zealand Gazette and Wellington Spectator*, 19 June 1841, 2.

[311] *New Zealand Gazette and Wellington Spectator*, 19 June 1841, 2.

Such activities display the importance of forest land resource planning to colonists during this period.

Throughout the 1840s, forest land use by European settlers in the Wairarapa and beyond can be characterised in several ways. In the Ruamahanga Valley, squatters began to settle with a view to the exploitation of forest resources through clearing for pastoralism; however, efforts to accomplish this goal failed during this period, and squatters were primarily concerned with maintaining a low-level presence on their leased plots of land until industry on a larger scale became feasible. Moreover, squatters became entwined with their Māori landowners' resource management practices and cultural justice systems, tying them briefly to traditional forms of occupation in the area. Further afield, kauri cutting in the Far North was opposed by government entities on military grounds; however, efforts to preserve kauri forest failed due to a lack of enforcement and the valuable nature of forest burning, clear-cutting, and other forms of exploitation. However, conservation efforts around town belts represent a different angle of colonial efforts to control forest land use, representing financially-motivated moves toward the creation of public forested spaces unmolested by logging or cultivation, albeit at the cost of Māori traditional methods of sustainable forest land development.

II: Māori uses of forest land resources, 1840 to 1850

In direct contrast to European colonial desires to "subdue" or "tame" the forests, Māori methods of resource management continued to centre on sustainable use of forest and timber resources under the "ethos of 'kaitiakitanga'" - that is, land guardianship at a hapū level.[312] Attorney-General Swainson remarked in 1859 that "forests in the wildest part of the country have their claimants. Land apparently waste is highly valued by them. Forests are preserved for birds, swamps and streams for eel-weirs and fisheries. Trees, rocks, and stones are used to define the well-known boundaries."[313] Nonetheless, continuation of these methods became increasingly difficult throughout the 1840s as

[312] W. Pond (1997) "The Land With All Woods And Waters" (unpublished draft). Waitangi Tribunal, Wellington, New Zealand, 14.

[313] H. H. Turton (1883). *An Epitome of Official Documents Relatives to Native Affairs and Land Purchases in the North Island of New Zealand.* Wellington: Didsbury, 23.

land claims and European purchases greatly expanded. As forested land became increasingly scarce, public opinion among Māori began to crystallise into various schools of thought: chiefly, those who wished to restrict access to hapū-owned forested land, and those who wished to clear and cultivate it in the European style, though severe dissent existed even among these schools.

At Hokianga, dissent against forest clearance had become evident in the community by 1841 at the latest. Captain James Ross, attempting to re-fit his ships *Erebus* and *Terror*, was turned away from Taumarere due to the "severe bitterness" Māori were expressing at the prospect of clearing yet more forest.[314] While Ross eventually acquired a number of spars by travelling a considerable distance downstream, he found that the local rangatira Awara was reluctant to clear forest for the "trifling payment" that Europeans had previously paid for spars, due to scarcity and tradition-based opposition. Instead, Awara demanded a double-barrelled shotgun – an exceedingly valuable item that Ross was, in turn, unwilling to hand over.[315] Māori concerns over land usage in Hokianga are corroborated in Māori sources. In 1843, *Te Karere Maori* reported that Māori landholders in the area continued to demand high levels of compensation to solve forest land resource disputes, specifically the trampling of forest cultivations by escaping cattle:

> e aue ana ngā Pākehā o tenei wahi, o Hokianga, i tenei ra ... mo te mea, ka hono tonu te haerenga mai o ngā tangata Māori, kite tiki utu mo ngā taiepa kua wawahia e te kau; mo ngā mara ano hoki kua pareho te kai ... whakaaro ana te Pākehā ra, kahore i maha rawa ngā mea i pareho i ngā kau, ka mea atu ia 'kia kotahi tekau ma rua hate hei utu'.[316]

An 1842 account of a civilian writer's journey through the various hapū of Hokianga also reveals this desire for forest preservation or, at the very least, higher rates of compensation for alienated land. The rangatira Papahia, who had signed a pre-emptive land lease with Catholic missionaries in 1839, was compelled to request further

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[314] J. C. Ross (1847). *A Voyage of Discovery and Research*. London: Murray, 67.

[315] Park, "Forestry," 21; Ross, "Voyage," 67.

[316] *Te Karere Maori*, 1 July 1843, 26. (*The Pākehā of the Hokianga area are upset today because Māori keep coming to seek payment for the fences damaged by cattle, and the cultivations where food has been destroyed ... the Pākehā think that the damage caused by the cattle is not significant, so they say 'I'll only give twelve shillings for payment'.*)

compensation from George Clarke, the Crown's Chief Protector of the Māori, after discussing the deal with the author of the account:

> pu ano tenei i te pukapuka ki a te Kawana nei, kotahi mea i pouri ai tana ngakau, ko te tahaetanga o te hoko, i mea mai ia me kōrero ki a te Kawana, kia tonoa he kaipuke whai taonga kia hokoa ngā rākau o Hokianga.[317]

The significance of the land itself to Māori, then, was higher than what colonists had initially valued it as, documenting a desire, if not for the preservation of the land, for proper compensation thereof. This heightened level of importance is also evident in the language used in property negotiations; Māori documents ceding "magnificent kauri forest" land at the Wainui block in Kawerau emphasise the cultural importance of the land, its forests, and the resources within:

> Kua oti o matou whakaaro katoa mo tenei wahi koia ka whakarerea ka tukua rawatia tenei wahi whenua o matou tūpuna i homai ki a matou me ona awa, roto, wai, mara, kohatu, pari, aha noa iho i runga, i raro, i te whenua kua tukua rawatia kia Wikitoria te Kuini o Engarangi ki ngā Kingi Kuini i muri i a ia ake tonu atu koia matou i tuhituhi ai i o matou nei ingoa me o matou tohu.[318]

According to this deed, the major factors tying Māori interests to the land were the ancestral links and whakapapa attached to the land, alongside the resources within the forest itself. Conspicuously absent from the language in the deed is any acknowledgement of the wood, timber, or trees within the stated boundary; while sawpits and mills are described in defining the boundaries of the block, as well as a singular kauri on the corner of the surveyed land, the forest itself is not designated in the deed.[319] This is broadly representative of the notion that Māori ties to land were often spiritual, and the resources were not merely "an impersonal commodity to be exchanged for profit in a

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[317] H. H. Turton (1882) *Maori Deeds of Old Private Land Purchases in New Zealand, From the Year 1815 to 1840, with Pre-Emptive and Other Claims*. Wellington: Didsbury, 267; *Te Karere Maori*, 1 June 1842, 23. (*Out of the documents that he sent to the Governor, one thing saddened him: that he had been cheated with the sale. We said he should ask the Governor to send a cargo ship to re-purchase timber from Hokianga*.)

[318] Turton, *Deeds*, 259. (*All our interest in this land has ceased; wherefore we forsake and fully give up this portion of our land, which descended to us from our ancestors, with its rivers, lakes, water, cultivations, stones, cliffs, all above and all below this land which we have fully given up to Victoria the Queen of England, or to the Kings or Queens who may succeed her for ever and ever.)*

[319] B. Rigby (1998) "The Crown, Māori, and Mahurangi, 1840-1881." Wai 674, F001, Waitangi Tribunal, Wellington, New Zealand, 45.

market place."[320] In this manner, the reluctance of many to sell or exchange their land, either altogether or for comparatively little profit, displays a prevalent attitude towards forested land among tangata whenua at this time.

The inhabitants of the Mahurangi area at Waitemata also dissented against European forest clearance. Following an 1841 Ngāti Whatua transaction that seemingly surrendered land resource usage rights, other iwi in the region were quick to assert their pre-emptive rights to the land, effectively nullifying the land sale. The establishment of a sawmill at Te Ngaere in 1846, for example, was opposed by local rangatira, directing the sawyer John Taylor to "desist from felling and sawing Timber ... Chiefs loudly exclaim against such infringements upon their rights".[321] The rangatira demanded financial compensation and the expulsion of European sawyers from the land, indicating concern for the economic impact of sawmilling on their whenua.[322] Similarly, several rangatira who had not been represented in the original 1841 purchase agreed to sell "mo tetahi o to rātou wahi,"[323] an entirely unsurveyed transfer that almost certainly did not alienate Ngāti Whatua's resource usage rights until further negotiation.[324] European sources of this time remark on the importance of being aware of land resource values in interactions with Māori land. A highly critical letter to the editor of the Auckland-based newspaper *The New Zealander* in 1845, for example, complained that:

> a Māori will *Rāhui* or *tapu* any convenience that you derive or use through him, - such as pahs, or roads, fire, wood, or water; and if you break that *tapu* ... he will impose whatever *utu* he pleases upon you.[325]

The reluctance of interested parties to surrender the forest resource usage rights to individual Pākehā, or to the Crown, without extensive compensation, reveals a desire for the continuation of Māori methods of land management even in the face of land transfer. While this may have been motivated by economic concerns rather than the ideal of kaitiakitanga at this stage, the dissent evident in these documents is nonetheless

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[320] Rigby, "Empire," 14.
[321] Rigby, "Mahurangi," 27.
[322] Rigby, "Mahurangi," 27.
[323] (*Some portion of their land*)
[324] Rigby, "Mahurangi," 24.
[325] "Letter to the Editor." *New Zealander*, 3 January 1846, 3.

significant as evidence of a desire for the preservation of traditional land management.[326] These first-hand accounts of dissatisfaction with European methods of forest land management reveal the beginnings of dedicated efforts among Māori against timber clearance and pastoralism, a stark contrast to European trends towards forest land resource exploitation.

Discourse among Māori concerning the extent to which European customs should be integrated into traditional cultivation methods was often turbulent, and no clear, singular current of thought existed to unify these diverse beliefs. However, a common viewpoint on forest land resource use changes was that European-style cultivation of maize and wheat, as well as the increased use of industrial farming equipment, could be integrated into mahinga kai without compromising Māori principles of land use. An article in *Te Karere Maori* asserted that:

> otirā ekore au e mea kia wakarerea katoatia ngā kai Māori te ngaki, kao, me ngaki tahi ano ta te mea, i ahakoa he mara nui wakaharahara ekore e roa ka oti, i ngā okiha i ngā hoiho ranei, i hokoa e koutou koia au ka mea ai, me tango i tenei ritenga rangatira mo koutou.[327]

Such an outlook indicates a willingness among some Māori to adopt the cultivation methods of European settlers, even if only for trading purposes; however, the necessity of the publication of the notice itself would also imply some level of dissenting opinion within the community. The writers of *Te Karere Maori* continued to assert an integrationist viewpoint, indicating a desire among some commentators to integrate the Māori economy with European crops and methods of planting.[328]

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[326] H. Whaanga and P. Wehi (2017). "Rāhui and conservation? Māori voices in the nineteenth century niupepa Māori." *Journal of the Royal Society of New Zealand* 47, no. 1, 104.

[327] *Te Karere Maori*, 1 November 1842, 45 (*I don't mean to suggest that we should abandon traditional cultivation altogether; no, we should cultivate these foods together, even if the land is vast and difficult to till, whether it is kumara or wheat, cattle or horses; it was exchanged fairly, and therefore I suggest that we adopt this noble custom from them.*)

[328] Ian St George (2009). *Colenso's Collections*. Wellington: New Zealand Native Orchid Group, 84.

S. C. Brees (1844). *Whaling station, Te Kopi, Palliser Bay, 1844*. B-031-025, Alexander Turnbull Library, Wellington, New Zealand.

This integrationist ethos, especially in Wairarapa, was linked to the introduction of Christianity and its associated ideas concerning community living. Increasingly, Wairarapa's hapū, particularly those within Ngāti Kahungunu, tended to leave their sites of traditional habitation to be closer to churches, as well as to pursue European methods of cultivation that were often promoted by missionaries. Maata Te Opukahu, a wāhine of Ngāti Rangiwhakaewa, reported at a land partition hearing:

> I have lived at Piripiri. It is our present permanent kāinga. I lived at Hautotara and am doing so now, for I have come from there. I was living at Mangatoro for a long time and then went to Hautotara when I entered Christianity so as to be near the Church.[329]

Te Opukahu was likely recalling events that occurred from 1845 to 1847, coinciding with Colenso's orders to construct chapels at Hautotara.[330] Later reports by Europeans corroborate that some movement away from settlements on the edge of the forest was occurring by the end of the 1840s. An 1858 report from the Church Missionary Society stated that pā "in olden times" had been largely abandoned in South Wairarapa; one ariki asserted that "our Pā's now consist of a man and his sick wife, Christ is our only Pā now," a change that generally alienated Māori from their whenua and shifted their

[329] P. Parsons and D. Ropiha (2003). "Rangitāne o Tamaki-nui-ā-Rua: Traditional History Report." Wai 863, A068, Waitangi Tribunal, Wellington, New Zealand, 56.
[330] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 54;

turangawaewae.[331] Colenso himself also reported on the temporary movements of Wairarapa Māori for religious purposes. A journal entry of 23 March 1845 notes that "9 young Christian couples" had gathered, along with their hapū, at Waipukurau to be married at "their neat new chapel" by a member of the Church Missionary Society.[332] The creation of new sites of religious importance caused significant movement that directly changed Māori interactions with forest land resources. Colenso reported in 1845 that rural Māori often found themselves now "scattered and distant" from population centres, which began to consolidate around newly-constructed religious centres more heavily influenced by European settlement.[333] A Māori Land Court assessor's book, which details the movements of smaller populations throughout Wairarapa to 1870, documents the beginnings of relocation centrally to the political and religious centre of Pāpāwai towards the end of the 1840s, often presented as "e noho huihui nei i Pāpāwai."[334] While many of these new centres continued to operate as settlements on the edge of the forest – for example, Colenso visited Te Waiparati and Pirapirau, which he described as "at the edge of a forest" and "on the very edge of a dense dry forest ... delightful to wander in its shade" – it is clear that the process of population redistribution due, in part, to the advent of Christian missions in the area, had nonetheless begun.[335] Although the relocation of tangata whenua to these new centres did not directly affect the methods by which they interacted with their forest environments, it is likely that the increase in clustered populations, alongside the newly "scattered" nature of cultivation sites, would have affected access to resources on the part of Māori.[336]

Situations where Māori political figures were increasingly unwilling to sell their rights to forested land were not limited to the North. In South Wairarapa, rangatira Arthur

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[331] B. Gilling (2004). "Lands, Funds, and Resources. Aspects of the Economic History of Māori in Wairarapa ki Tararua since 1840." Wai 863, A118, Waitangi Tribunal, Wellington, New Zealand, 45.

[332] W. Colenso (1878). "Memorandum of a journey into the interior, in which I succeeded in crossing the Ruahine mountain range, with notes on the peculiar local botany of that region, etc." Paper read before the Hawkes Bay Philosophical Institute, 46.

[333] Colenso, "Memorandum," 34.

[334] *Māori Land Court Assessor's Book*, c. 1870-1915, MSY-4817, Alexander Turnbull Library, National Library of New Zealand, Wellington, New Zealand. (*"...meeting in Pāpāwai."*)

[335] Colenso, "Memorandum," 34.

[336] cf. William Colenso, journal entry, 4 April 1850.

Wellington Te Kawekairangi refused outright to lease land to the Church Missionary Society for fear of disruption to traditional activities, especially religious rites, articulating in a letter to William Colenso in 1845: "Be thine the praying to God – be mine the praying to the Devil."[337] Te Kawekairangi was also known, by the Wharekaka station squatters, to be exceptionally firm in his demands for payment; in a story from the same year by Frederick Weld, he, "according to one account, tore out one of his [companion's] eyes" in order to intimidate a squatter.[338] Weld's account effectively documents dissent against outright land seizure by Europeans; indeed, this apparent "disposition to plunder," as Weld took it, was "in strict accordance with [Te Kawekairangi's] notions of equity," showing a prominent part of South Wairarapa Māori discourse around land use.[339] The opposition by Wellington Province rangatira to land alienation reached a fever pitch in 1846, when Grey attempted to "take possession" of the Hutt Valley area (including the Akatarawa and Pakuratahi forests), which caused "some of the natives to refuse to leave the ground" due either to their separation from the iwi or hapū that had allegedly sold the land within the district, or their desire to continue to use their traditional land resources and methods of cultivation.[340] Clearly, the unwillingness of rangatira in the Wellington region to accept the often-inadequate compensation given by European colonists played a major role in Māori politics at this time.

Similarly, and in the same vein as Te Kawekairangi's opposition, Otaraia Pā rangatira Ngātuere refused outright to sell any part of his cultivated or forested land to European settlers, concerned about the potential effects it could have on territory rights and access to resources. In an 1848 kōrero with Land Claims Commissioner Bell and the Church Missionary Society representative James Kemp, Ngātuere noted that the land "had belonged to [Ngāti Kahungunu's] forefathers, and was theirs now ... there was plenty of room, and the white man could occupy land as the squatters were doing, without buying it." Moreover, Ngātuere argued for Ngāti Kahungunu's ultimate supremacy over the

[337] Goldsmith, "Wairarapa ki Tararua," 13.
[338] Williams, "Weld," 62-63.
[339] Williams, "Weld," 62-63.
[340] Williams, "Weld," 63-64.

whenua of the moderately-forested Ruamahanga Valley, "not being driven away again into the scrub and the barren hills" by land purchase agreements that would undoubtedly alienate this landscape.[341] While Ngātuere and fellow rangatira Manihera vehemently opposed the sale of land to European colonists, they were not entirely opposed to European uses of forest land resources, so long as their rights were non-exclusive and based on a balanced distribution of the land between settler pastoralism and traditional resource use. Kemp noted that "the wheat growing around, the horses, the many pigs, were [settlers'] gifts," showing that the Otaraia rangatira were not opposed to pastoralism itself, and may have agreed with the inclusion of European plants in mahinga kai practice.[342] Rather than being entirely opposed to wheat and maize plantations, Ngātuere and Manihera appear to have been opposed to the effects that land purchases might have on their forested land; as a result of European activities in Hawke's Bay and throughout the West Coast of the North Island, "vast tracts" had been "overrun" with non-traditional uses of land "by the white man's instruction," leading them to conclude that colonists could "stay on the land, and pay tribute for it – but never let it pass into [their] hands by sale."[343]

Māori in other parts of Wairarapa were also concerned with keeping customary rights to forested land. In 1843, George Clarke noted that "the families have in common with the chiefs, the right of ... gathering the natural productions of the woods and open country for the purpose of food, etc.; every individual of the tribe having and exercising these privileges in common," a status that could easily be disrupted through land purchases by Europeans.[344] This concern likely stemmed – aside from a generalised desire to preserve traditional gathering methods - from the exile and return of Ngāti Kahungunu and Rangitāne to Wairarapa, which was a relatively recent event that had drastically modified the politics and economy of iwi and hapū in the region. At 1840, Wairarapa iwi continued to experience the long-term political and social effects of the "traumatic"

[341] Hippolite, "Wairoa," 17-19.
[342] Hippolite, "Wairoa," 19.
[343] Hippolite, "Wairoa," 19.
[344] Pond, "Woods and Waters," 22.

arrival of Ngāti Toa and her allies throughout the previous two decades.[345] Many hapū throughout the Wairarapa and Ruamahanga valleys continued to rely on forest land resources for shelter, defence against further Ngāti Toa raiding parties, and mahinga kai practices; Te Hiaro, a Rangitāne rangatira situated at Te Hawera, between Eketahuna and the Manawatu Gorge, lamented:

> ngā toenga iwi, i ngā iwi ingoa rongo nui o namata, kua mate atu, kua hemo, kua kore noa iho; tenei ngā oranga te noho nei, te piri nei, taki tokorua, taki tokotoru; kei te take rākau e piri ana, kei te ngahere, kei te take toetoe, kei te tahataha awaawa e piri ana.[346]

Contemporary European illustrative depictions of Māori settlements in Wairarapa, such as sketches and paintings by Marshall, Brees, and Smith, reinforce that villages and pā continued to be built in areas of light-to-moderate bush, typically on the edge of the forest or within clearings. Rangitāne and Ngāti Kahungunu, at this point, began to gradually repopulate their traditional areas of occupation throughout the southern district. Hapū who had been displaced to the Ahuriri refugee settlement of Mahia, for instance, began to relocate to the settlements of Te Kopi, Omoikau, and Whakatomotomo between 1840 and 1842.[347] In 1842, missionary Octavius Hadfield reported that Ngāti Kahungunu generally relied on gathering kai from the forest itself: they were those who "had deserted their land, but who have lately returned ... they were in the woods looking for food, having not yet any regular plantations."[348] Colenso, similarly, described Rangitāne living conditions in 1846 as being based in settlements on the edge of Tamaki-nui-ā-Rua, a large forest extending from Ahuriri southwards towards Otaraia: Te Hawera, for example, was:

> delightfully secluded from the world. The eternal forests – the 'Trees of Jehovah' - stood around; while everywhere the gracefully ever-waving fronds of the fern-

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[345] Gilling, "Lands," 43.

[346] P. Goldsmith (1996). "Medicine, Death, and the Gospel in Wairarapa and Hawke's Bay, 1845-1852." *New Zealand Journal of History* 30, no. 2, 169-170. (*The remnants of the tribes of the mighty, of the renowned of former days, [are] now dwelling by twos and threes among the roots of the big trees of the ancient forests, and among the long reeds by rills in dells.*)

[347] Gilling, "Lands," 43.

[348] Letter from Reverend Octavius Hadfield to his family, August 30 1842. New Zealand Electronic Text Collection, Victoria University of Wellington.

> trees which skirted the plain, afforded such a delightful contrast to the sombre depths beyond...[349]

corroborating Te Hiaro's observations of the same period. Furthermore, Colenso notes that Rangitāne kaimahi "had put up a little Taketake, and collected a quantity of soft fern," as well as having evidently engaged with bird hunting in the area by gathering "the elegant snowy plumes of the kautuku [*sic*]" for korowai.[350] Colenso's observations almost entirely ignore the status of Te Hawera's inhabitants as recently-returned refugees, as Te Hiaro's testimony reveals; nonetheless, his detailing of forest land use throughout the early period of Rangitāne's return to the Wairarapa districts is valuable in determining Māori stances towards new forms of resource use. In this case, the forest resource use of Te Hiaro and his hapū remained firmly within the scope of traditional methods of living, such as use for shelter, clothing, and kai. Te Hiaro was not, however, unaware of the changes that were occurring in forest land use throughout this period of displacement and colonisation. In an 1849 address, Te Hiaro noted that:

> the tree-buds expanded; the intricate paths of our low forests were once again passable to the foot of the Native man ... your ancestors once spread across the country; even as our birds the koitareke and kiwi once did; but now their descendants are even as the descendants of these birds, scarce – gone – dead – fast hastening to utter distinction![351]

Such sentiments reflect the rapid changes – local extinction of valuable and sacred bird life, representations of deforestation, and the newfound refugee status of several hapū throughout the country – that Te Hiaro experienced in attempting to continue traditional methods of living on "the edge of the bush". Te Hiaro was also aware of the changes in forest resource use throughout the rest of the country, which would indicate that the topic was of some importance among Rangitāne. He also described a journey "to Manawatu ... [and] afterwards heard of a white man called Hadfield being at Kapiti, at Otaki," and that he "heard of his going up the East Coast, all over the rocks to Turakirae. I sent four of my children to Mataikona to meet him ... I built a chapel; we waited

[349] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 53.
[350] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 53.
[351] William Colenso, journal entry, 4 April 1850.

expecting."[352] Such an attitude towards the missionaries working in the lower North Island is representative of Te Hiaro's broader aims; to adapt to this new way of resource use and population distribution while maintaining connections to his hapū and iwi. Regardless of Māori desires to maintain pre-colonial ideas of cultivation and habitation, colonialism was swiftly affecting forest land usage among post-exile Rangitāne at this stage.

Forest land ownership, and, in turn, the continued habitation of the whenua by its local hapū, was commonly overturned in South Wairarapa by land purchases and leases from the mid-1840s onwards. 1845 marked the beginnings of major transfers of land from Wairarapa Māori rangatira Wī Kingi Tutepakihirangi and Manihera Te Rangitakaiwaho, among others, directly to European settlers; for example, the moderately forested Maramamau Block, along the Ruamahanga River, was leased to Bidwill for "occupation" for a term of twenty-seven years.[353] During this time, however, Ngāti Muretu, a prominent hapū of Rangitāne, maintained take tūpuna regarding Maramamau; an 1883 Land Court debate centred around a series of pre-European land transfers that occurred during Ngāti Muretu's residency in Kapiti, demonstrating that "their take to the land was never extinguished" between the 1830s and 1880s.[354] Indeed, prior to Bidwill's interest in the land, it was apparently leased to Wī Waka and Matiaha Mokai, Ngāti Kahungunu landholders that maintained plantations in the area, but it was never sold or outright relinquished by Manihera (though Matiaha retained some portion of proceeds from leasing the land after his occupation thereof).[355] Manihera, speaking in 1867, confirmed that his claim to Maramamau was not made any less legitimate due to lease agreements: he "based his claim to the land on its possession by his ancestors, and on the ground he had never abandoned it to the conquerors."[356] This continued claim to the land's resources, even under the terms of Bidwill's lease, can be seen within the lease

[352] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 55.
[353] Deed leasing Maramamau to Bidwill, signed by Wī Kingi, Manihera, Bidwill, and others, 1 September 1845. 1/2-053607-F, Alexander Turnbull Library, Wellington, New Zealand.
[354] T. White (2002). "Jury Family Land Claims: A report commissioned by the Waitangi Tribunal." Wai 962, Waitangi Tribunal, Wellington, New Zealand, 85.
[355] "Native Land Court," *Wairarapa Standard*, 19 August 1867, 3; White, "Jury," 14.
[356] "Native Land Court," *Wairarapa Standard*, 19 August 1867, 3.

agreement itself: Bidwill is instructed to only "cut down timber for erection of fences for his animals, and for his plantations ... he may also drag as he pleases also and his men Timber for building houses and for other purposes for himself."[357] While this agreement clearly allows for some use of the block's forest land resources, these uses are somewhat restricted in nature, and clear-cutting, broadcast burning, and other methods of mass forest clearance without a direct, constructive purpose are conspicuously absent from Bidwill's lease, despite the burgeoning raw timber trade throughout the lower North Island. Manihera and Wī Kingi's caution in allowing European settlers to utilise forest land resources at Maramamau is indicative of a wider trend towards preserving the "conservation ethic" of the past, as well as being sure to maintain a strong hold on land ownership. Although no action was ever taken against Bidwill for potential overuse of the land, according to contemporary Wairarapa resident John Milsome Jury, the landholders maintained a high price for the land and included deliberate clauses against timber exploitation within the lease agreements.[358]

A number of these land ownership transfers, however, occurred within the rohe, conducted between ariki and rangatira without European input. A member of the Ngāti Moe hapū of Palliser Bay described, in Land Court testimony, the movement of their hapū following an 1846 land lease at Te Kopi. In this description, the custody of the land between Hiripi Stream and Waipipi Hill was, according to this testimony, transferred to Te Peehi Tupepakihirangi to fulfil strategic political objectives and continue a line of whanau ownership of that land:

> Ka moe a Wī Kingi [Tutepakihirangi] ia Kate Ruia, mokopuna a Hamahona ko te take tēnā i Tuku whenua ai a Hamahona kia Tutepakihirangi (tetahi), mo te kaha o Wī Kingi kite whakahaere ki Te Peehi hoki i ngā riri (tuarua). He take tipuna tonu tetahi no Wī Kingi ki rāua whenua.[359]

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[357] Deed leasing Maramamau to Bidwill, 1/2-053607-F.

[358] White, "Jury," 75.

[359] *Māori Land Court Assessor's Book*, c. 1870-1915, MSY-4817, Alexander Turnbull Library, National Library of New Zealand, Wellington, New Zealand. (*Wī Kingi [Tutepakihirangi] married Kate Ruia, the granddaughter of Hamahona; this is why Hamahona gave ownership to Tutepakihirangi, firstly because of Wī Kingi's ability to control Te Peehi, and secondly to return the deed to Te Peehi. Wī Kingi also has an ancestral connection to this land.*)

This particular type of activity within forest land management seems to have been both common in Wairarapa, following the 1842 return of Ngāti Moe and their close relatives Ngāti Muretu to Palliser Bay, and indicative of a general trend towards centralised migration practices among hapū along the Ruamahanga.[360] Soon after this transfer of land, Te Aitu-o-te-Rangi Jury – Wī Kingi Tutepakihirangi's cousin and Ngāti Moe wāhine of mana – was transferred land along the Ruamahanga at Waka-a-Paua (marked on Dennan's map as 'Jury's Island'), where Jury and her whanau would proceed to engage in traditional cultivation alongside timber harvesting.[361] In an 1868 testimony by Jury's son Te Whatahoro, he describes:

> [Te Aitu-o-te-Rangi] had a joint interest in the land as a Ngāti Muratu [*sic*] but it became wholly hers by the gift of Wī Kingi ... my mother and I cult[ivated] at Ngā Taira after the gift. At Pakihiroa also – and at Ngaki-a-tōtara also – I lived there and my father's fence was there – The timber was taken from the bush and some out of the bush that had been given to Te Waka. I also cult[ivated] at Ngara-a-anui.[362]

It is significant, moreover, that the land at Waka-a-Paua was transferred specifically to Te Aitu and not her husband, a European settler; this seems to have been a deliberate decision by Wī Kingi, who "disputed" the land transfer before granting it to her.[363] This may reflect a desire to keep land within the hapū or iwi rather than transferring ownership of valuable forested land - and its resources - into European hands, though the land was eventually sold to the Crown in 1856.[364] Te Whatahoro's testimony also implies that timber harvesting and forest land use by Rangitāne during this period could be partially characterised by individual or familial resource use, limited to whanau or small hapū groups and based on smaller-scale landholdings, differing from the almost entirely communal use among larger groups that Rangitāne saw before 1840.[365]

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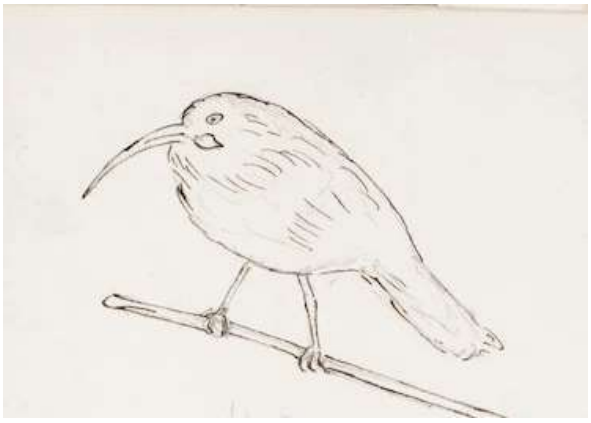
[360] E. Best and T. Jury (1865). "Miscellaneous Maori notebook." Unpublished notes, MS-0198, Alexander Turnbull Library, National Library of New Zealand, Wellington, New Zealand.
[361] White, "Jury," 13.
[362] White, "Jury," 13.
[363] White, "Jury," 14.
[364] H. McCracken (2001). "Land Alienation in the Wairarapa District undertaken by the Crown and the Wellington Provincial Council 1854-c.1870s." Report commissioned by the Crown Forest Rental Trust, Wellington, New Zealand, 42.
[365] White, "Jury," 13-14.

However, the general trend of Ngāti Moe and Ngāti Muretu acquiring and transferring land among themselves appears to have led to the continuation and reinforcement, at least south of Tauherenikau, of traditional forest-related practices and mahinga kai.



J. C. Crawford (1863). *Huia, 16*. E-172-019, Alexander Turnbull Library, Wellington, New Zealand.[366]

Forest land resource use in the Wairarapa districts by Māori throughout the 1840s followed various currents. Among Māori, there was considerable debate as to the form that land sales to Europeans should take, with some demanding high levels of compensation for their severed connections to whakapapa and whenua; however, others attempted to find a middle ground between outright sale and the absence of Pākehā altogether, contributing to the creation of a short-lived leasing system. Moreover, the advent of Christianity in the area caused further changes to forest land resource use, resulting in the further "scattering" of traditional subsistence cultivation and beginning a trend towards clustered populations around religious sites. Intertribal and interpersonal interactions among Māori, without European involvement, also contributed to movement of populations within the region; hapū that tended towards communalism throughout earlier decades began to exercise their land usage rights on individual or familial bases. However, the major "conservation ethic" among Māori concerning forest land usage remained relevant, contributing to the methods by which land was negotiated,

[366] This sketch depicts a "tame" huia belonging to one of the hapū of Wairarapa, within Rangitāne.

bought, and sold, as well as becoming evident in the political and social discourse of the time.

Chapter III: Developments from the first Wairarapa land sales to the Forests Act of 1874

The period spanning 1850 to 1874 saw a further acceleration of European exploitation of forest resources, particularly in Wairarapa, as European settlers and organisations acquired increasingly significant quantities of freehold land. Changes in land tenure, and the accelerating pace of colonisation in general, posed significant challenges for Māori communities in Wairarapa, who nonetheless sought to maintain traditional practices. This chapter commences with an analysis of how European attitudes and policies towards forest management evolved in this time. It then evaluates how Māori communities, particularly those in Wairarapa, responded. The extent to which certain events and policies, such as the Forests Act of 1874, might be considered to represent the emergence of a "conservation ethic" among European settlers is also assessed.

I: European uses of forest land resources to 1874

Throughout the decades following 1850, significant changes were made in the ways Europeans used and continued to use forest land resources throughout Wairarapa and the colony. Land purchases in the area became commonplace, as did European settlement and the resultant changes in forest land resource size, constitution, and usage. Shifts away from a leasehold economy and towards the outright ownership of the land through the Crown affected land use by transforming the "quarrying" of the past into permanent land clearance and development. The pursuit of large-scale pastoralism and settlement by Crown and independent European entities also led to the purchase and outright removal of significant tracts of forest land. Moreover, sawmills and other means of directly harvesting timber resources became increasingly common from the 1850s onwards. By the time of the Forests Act in 1874, the Wairarapa landscape had been greatly altered by European use of forest land resources in the area.

Among the most significant developments affecting European forest land use in Wairarapa during this time was the 1853 establishment of the Wairarapa Small Farms Association, which considered the forests of South Wairarapa a definite obstacle. The Crown, under McLean, had acquired the majority of the South Wairarapa district early in 1853 from Te Retimona Te Korou of Ngāti Hamua. Gazetted in August of that year,

the Small Farms Association endeavoured to purchase a single 25,000 acre block from the Crown in the centre of the district, under the pretence that small-scale farming was more suited to rapidly-cleared forest and fern-land than larger-scale pastoralism, which had dominated the region in previous years.[367] After a significant delay, the Association completed a survey of two smaller blocks, termed Greytown and Masterton, in February 1854; these mainly consisted of "impassable" forest that had not yet been acquired for sheep stations, and were sold in forty-acre "suburban blocks" by ballot for ten shillings per acre. Over the following year, a portion of these blocks were sold to a group of 79 settlers, though 14,000 acres remained at the site of Masterton and along the proposed trunk road through the Taratahi area.[368] The farms surrounding these settlements initially focused on timber-cutting with a view to planting "patches of wheat, barley, oats, and other cereals," as well as establishing small cattle runs on the land. By 1857, efforts to clear the forest for these purposes, in addition to constructing a road, had begun through the dense, indigenous "three-mile bush" between the Greytown and Masterton settlements, and a new Featherston settlement was proposed.[369] Moreover, a Greytown public-house was christened *The Forester's Arms*, reflecting the intended purpose of the first wave of settlers and a number of stores in the district were named *Royal Oak* by 1870, evoking the imagery of exotic flora.[370] Individual occupiers were required to spend at least £30 on "improvements" – including clearing forest – by the end of March 1855 or forfeit their right to the acre of land adjacent to the trunk road. It is likely that clearing this bush was the primary occupation of Small Farms Association settlers throughout the decade.[371] Further forest clearance was interrupted by "difficulties ... in adjusting Native claims" on the eastern side of Greytown, where a small amount of native forest remained due to its exclusion from earlier purchase agreements.[372] The presence of this bush irritated many colonists, such as Richard Wakelin, a resident of the new settlement, who claimed that the "town belt" of forested land was an "injury [Greytown] had

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[367] Gilling, "Lands," 65.

[368] *Wellington Independent*, 22 February 1854, 3; *Cook's Strait Guardian,* 8 November 1854, 4; Gilling, "Lands," 65; *New Zealand Chronicle*, 22 November 1856, 2.

[369] *New Zealand Chronicle*, 28 January 1857, 3.

[370] Cyclopedia Company, Ltd. (1897). *Cyclopedia of New Zealand*. Wellington: Cyclopedia Company, 886; *Wairarapa Mercury,* 16 July 1870, 1.

[371] *Wellington Independent*, 30 November 1853, 3.

[372] R. Wakelin (1877). *History and Politics*. Wellington: Lyon and Blair, 34-35.

sustained by being shorn of half its dimensions" of land that could otherwise be cleared and replaced by pasture, "forfeited acres" that could have apparently produced "a revenue of little short of £100 per annum."[373] While this issue was rectified by a new purchase agreement in 1858, annoyance towards the density of the bush, and settlers' failure to entirely "introduce dairying to the bushlands," remained.[374]

Unknown (1865). *Main street, Greytown, looking south from the Forester's Arms Hotel*. 03-89/105, Wairarapa Archive, Masterton, New Zealand.

1857 marked the foundation of Carterton, originally simply termed Three Mile Bush, which was a bush settlement explicitly dedicated to forestry and milling; each ten-acre section of Three Mile Bush was an incentive for settlers to clear the land for pasture, resulting in dedicated clearance of forest along the new road. Three Mile Bush settlers, moreover, "when not occupied on their own land, [were] employed on the Public Works" of clearing yet more forest between the townships of South Wairarapa.[375] The scheme was popular among advocates for colonialism in Wairarapa, and was successful in "discovering a mode of utilizing the bush areas which would provide a sound economic

[373] Wakelin, *History*, 34.

[374] R. E. Hambly (1966). "Dairying in the Wairarapa: A Socio-Economic Survey Interpreted in Terms of Historical Small Farm Settlement." MA thesis, Victoria University of Wellington, 8-9.

[375] Hambly, "Dairying," 10; 'An Elector who Works on the Roads, Who Voted for Captain Smith, and will do so again,' "Original Correspondence," *Wellington Independent*, 13 October 1858, 3.

basis for the permanent settlement of the bush".[376] The "improvement" of land along the trunk line, then, became a profitable industry in itself, as the clearance and processing of timber served a dedicated purpose in constructing new settlements. The Crown was eventually successful in clearing all forest along the Three Mile Bush Road by the end of March 1859, as well as clearing a road from Featherston to Te Kopi at the same time, representing a marked reduction in the profitability of the Wairarapa timber industry on completion.[377] Nonetheless, writers continued to celebrate the clearance of the bush. One writer stated that:

> cultivation is extending, the forest giants lie prostrate at the axemen's feet, that 'good servant but bad master' fire, is busy consuming the timber and enriching the soil, and it is gratifying to see that a considerable portion of peas and broad beans ... will soon be in table blossom.[378]

Removing the forest entirely, save for ash to be used in fertilising the soil, was, here, seen as a conquest for the settlers of Three Mile Bush. Ensuring the land was primed for pastoralism and English cottage gardening was not only a priority or necessity for the colonists, but an achievement to be celebrated; "taming" the "waste lands" of the South Wairarapa forest was almost characterised as an heroic act, and the outright elimination of most forest land was part of this.[379] Later in the piece, the writer documents a gathering of Wairarapa settlers wherein the colonists toasted to their progress in "diminishing" the "dark secluded bush" and its "aboriginal natives"; Queen Victoria, the British Royal Family, and the advancement of "agricultural and pastoral interests" on the land were equally honoured.[380] Even following on from the mass clearances of 1857-59, cleared forest land in the area was generally used as cattle pasture and horticultural land, a change reflecting the complete removal of the "severe environment" of the Three Mile Bush. In this, a symbolic step had been taken, in the eyes of Europeans, from the "doubtful accommodation" that the Wairarapa bush had served as in the past, and towards an entirely pastoral mode of life, one more compatible with small-scale dairy

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[376] S. H. Franklin (1960). "The Village and the Bush: The evolution of the village community, Wellington Province, New Zealand." *Pacific Viewpoint* 1, no. 2, 160-161.
[377] Hambly, "Dairying," 21-22.
[378] *Wellington Independent*, 12 August 1859, 3.
[379] *Wellington Independent*, 12 August 1859, 3.
[380] *Wellington Independent*, 12 August 1859, 3.

and grain farming.[381] Developments in Carterton, and the European public's reactions to them, can be considered a microcosm of New Zealand's sentiment regarding forests throughout the period.

Developments in the Small Farms Association settlements following this point were marked by yet more changes in the timber industry. Several sawmills and timber processing plants continued to operate in the district, even after the completion of the road through Three Mile Bush; while these initially served only the communities directly affiliated with them, export of timber outside of the region by Europeans followed by the end of the period. From 1854 onwards, the merchant Samuel Revans owned a stake in Woodside Saw Mill at Featherston, for example; Revans sought permission, in 1867, to construct a road between the mill and Tauherenikau to transport timber via the river.[382] The mill continued working until at least 1874, when manager Alexander Gallon ceased overseeing operations.[383] Hart Udy, another sawmiller, took ownership of Matarawa Sawmill in 1865 (also managed by Gallon), though the Udy family had been operating it for some time prior to this; the mill was apparently profitable, and Udy was comfortably placed within the upper-class of Wairarapa society.[384] Udy's mill also exported goods to "any part of the Valley," though processed timber was only available to those in Greytown, emphasising that these mills remained a solely local affair.[385] Less prominent sawmills, such as the Belvedere Saw Mills and Revans's Greytown sawmill, also operated in the time period following the completion of the bush road, and were applauded by the *Wairarapa Mercury* as important steps in the development of a self-sustainable Wairarapa timber economy.[386] These efforts to clear and process timber were limited in scope and breadth. While these operations were nonetheless profitable, sawmills in South Wairarapa generally dealt in more local activities, rather than the wholesale export of timber to other regions of the country, or abroad. Thomas Hooker,

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[381] Franklin, "Village," 160-161; Dinwiddie, *Old Hawke's Bay*, 18.
[382] *Wellington Independent*, 3 December 1867, 4; R. Hyde (1934). *Journalese.* Auckland: National Printing Company, 222.
[383] Cyclopedia Company, *Cyclopedia*, 921.
[384] Cruden, *Wairarapa*, 31.
[385] *Wairarapa Mercury*, 9 February 1867, 1.
[386] *Wairarapa Mercury*, 5 January 1867, 3; *Wairarapa Standard*, 16 July 1870, 1.

proprietor of the Belvedere Saw Mills at Three Mile Bush, for instance, mainly advertised his services as "cutting Timber for building purposes," including self-supplied "Tōtara, Matai, Red and White Pine," though "a stock of seasoned Timber" was available for purchase nonetheless.[387] Revans's mill at Greytown, likewise, provided tōtara building materials to local clients only; indeed, an advertisement of 1867 stated that "Wellington has no idea of the quantity of valuable timber that will yet go there from this valley," lamenting the mill's inability to afford or facilitate export beyond Wairarapa.[388] Likewise, Fairbrother's mill, at Carterton, sold "material for House Building" and "Posts and Rails split to order."[389] The highly localised condition of Wairarapa's sawmills was reflected in the public opinion of settlers. Regarding sawmilling at Carterton, one anonymous farmer wrote that:

> the two or three saw mills situated at Carterton ... are fully employed in cutting timber for the settlers of the Wairarapa, with a probility [*sic*] (if no more saw-mills be erected) of finding full employment for years to come without exporting any to Wellington or elsewhere out of the district.[390]

The piece also articulates the benefits of sawmilling to Wairarapa settlers, especially "in getting cheap timber to replace the slab whares" built by Māori during earlier decades; in a sense, saw-mills could be used as an effective method of re-contextualising the forest's resources from Māori possessions to local ones, owned and shaped by Europeans.[391] However, these changing contexts were largely overshadowed by the difficulty of exporting timber beyond the Remutaka ranges. The Crown's 1872 institution of toll gates throughout the Wellington Province was a major obstacle to the aspirations of Wairarapa sawmillers. Mass exports of timber were likely to cost upwards of ten shillings per vehicle, something that many found prohibitive.[392] One settler claimed that toll gates had "materially injured the Wairarapa timber trade," as the only

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[387] *Wairarapa Mercury*, 16 July 1870, 1.
[388] *Wairarapa Mercury*, 5 January 1867, 3.
[389] *Wairarapa Mercury*, 16 February 1867, 1a.
[390] A. Farmer. "Co-operative flour mills (to the editor of the Mercury)." *Wairarapa Mercury*, 23 May 1868, 3.
[391] A. Farmer. "Co-operative flour mills (to the editor of the Mercury)." *Wairarapa Mercury*, 23 May 1868, 3.
[392] Wellington Toll Gates Act 1875, article 2.

exports of timber now feasible to Wairarapa mill owners were that of substantially lighter processed wood, a task for which most mills were not furnished:

> A mill for dressing and preparing timber ought to be established in the Wairarapa. I have heard that a mill of this description in Wellington is doing a very extensive and profitable trade. I know there is plenty of timber in the Wairarapa; also, it is asserted that there is plenty of unemployed capital.[393]

These proposals were ambitious and were not generally achieved by the end of 1874. There were exceptions, however, to the rule of Wairarapa's timber industry being exclusively local; Woodside Mill, towards the end of the period, began to offer tōtara deliveries "in any part of town or country" throughout the Wellington province, though it is unlikely that many deliveries were made beyond the Valley. Weekly small-scale cargo services were conducted from Wellington to Masterton from 1868 onwards; these consisted of a costly passenger coach operated by Cobb & Co., as well as nine four-horse wagons.[394] A Wairarapa-Wellington railway line was proposed in 1869, and it was included in Vogel's Public Works agenda of 1870; however, the line to Featherston was not completed until 1878.[395] Nonetheless, the public opinion of settlers in the district displays their general attitudes towards the further exploitation of forest land resources across the colony; that is, that these resources existed for the purposes of building and for trade, and, when external trade could not become easily profitable, settlers' eyes turned inwards towards their own communities, characterising the Wairarapa timber trade at this point as a largely local and insular community endeavour.

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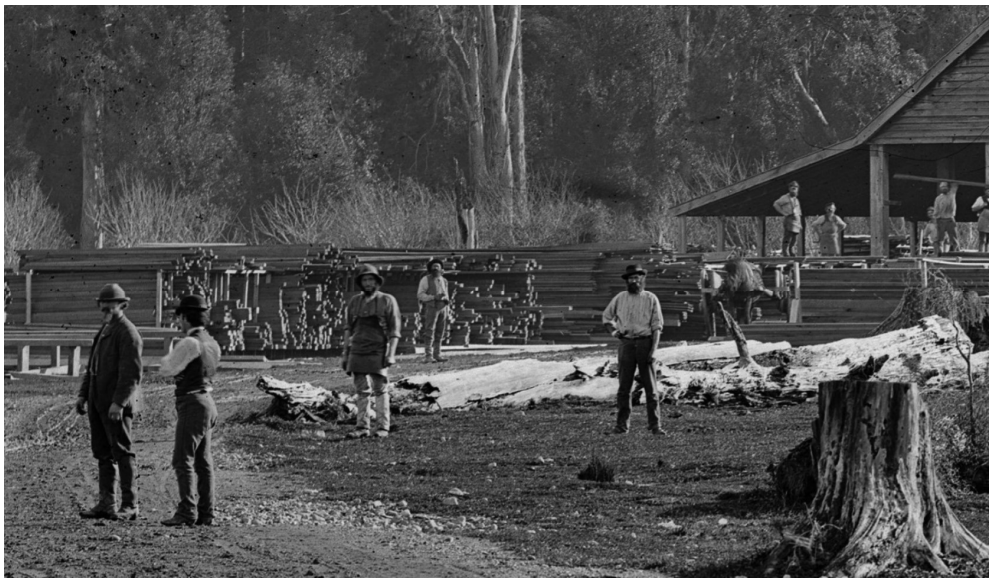
[393] *Wairarapa Mercury*, 21 May 1873, 2.
[394] *Wellington Independent,* 22 August 1868, 7; *Wellington Independent*, 7 May 1868, 8; *Wellington Independent*, 13 July 1869, 3.
[395] *Lyttelton Times*, 13 August 1874, 2; *Wairarapa Standard*, 3 September 1878, 3.



J. Bragge (c. 1874-76). *Stuart's Saw Mills, Hookers Line, near Carterton* [detail]. 1/1-000781-F, Alexander Turnbull Library, Wellington, New Zealand.[396]

Another milestone in European interactions with Wairarapa's forests was the 1872 arrival of Scandinavian settlers in the north of the region. Under Vogel's Public Works programme, a few hundred settlers from Denmark and Norway began to settle in the Forty Mile Bush, situated between Eketahuna and Ahuriri, for the purposes of land clearance. The new settlements, Norsewood, Dannevirke, and Mellenskov, were created using around 80 sections of 40 acres each (similarly to the Small Farms Association settlements) granted as payment for cutting and burning forested land.[397] These "intended townships" were located not on the edge of the bush, but well within it; Norsewood was built "within a mile of [a] camp in the bush," with Dannevirke "some 14 miles further in the bush," consisting of "picturesque huts" on remote bush sections.[398] As was the case with Carterton, the main motivation of settlers, though more explicit this time, was to clear the "thickly-timbered" land around them as swiftly and efficiently as possible, as the 1875 Crown Handbook stated, in order to secure ownership or

[396] This image depicts several workers, both Māori and European, standing in front of the sawmill at Three Mile Bush. Three cattle are also present, as well as yokes or oxbows with which they might haul lumber. Felled trees dominate the foreground, and piles of refined posts litter the background.
[397] *Wairarapa Mercury*, 20 August 1873, 2; Cruden, "Wairarapa Wealthy," 6; Hambly, "Dairying," 11.
[398] *Southern Cross*, 21 October 1872, 2.

occupancy of a larger section on which pastoralism could occur.[399] The Scandinavian settlements were dominated by forestry, even more so than Three Mile Bush's initial period; while pastoralism necessarily existed within these outposts, producing around ten tonnes of potatoes by October of 1872, their existence was generally defined by the "land improvements" programme and the production of processed timber resources for the Crown.[400] One correspondent described a typical day's work for a Scandinavian immigrant, stating that "'the women underscrub the bush before the men commence falling ... Danes are best for open country – Norwegians for bush,'" defining the settlers by the product of their land clearance labour rather than the simple peopling of "the wilds" alone.[401] Workers at these settlements were instructed to clear forest "on the main line of the road" twenty metres wide, including burning leftover stumps.[402] By mid-1874, Dannevirke had produced "70,000 Railway and Tramway Tōtara Sleepers" for the development of the trunk line through the bush, and had cleared around fifty miles of bush to serve as a road between North Wairarapa and the Manawatu Gorge, displaying that forest-based wood processing, felling, and clear-cutting dominated industry within the Scandinavian settlements.[403] The use of these new migrants as a means to develop and clear forest land, as well as the novel nationalised use of timber resources from the Forty Mile Bush, represented yet another advancement of deforestation and exploitation of New Zealand forest land due to settlement in the region. Moreover, the development was done with a view to permanently clearing larger tracts of land near the Manawatu Gorge, which, when cleared of forest, would theoretically reveal "level alluvial flats" along the river, which would be useful for dairy and sheep farming.[404] Nonetheless, the Scandinavian settlers in Forty Mile Bush also used forest resources in a less industrial manner, as earlier European settlers had done. One account noted that a Norwegian cottage had "a fire-place, and ... mats on the floors which the women have plaited very neatly out of New Zealand hemp," suggesting that their use of the forest was not simply

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[399] Hambly, "Dairying," 11; Vogel, J. (1875). *The Official Handbook of New Zealand: A collection of papers by experienced colonists on the colony as a whole, and on the several provinces*. London: Wyman & Sons, 190.

[400] *Wairarapa Mercury*, 20 August 1873, 2.

[401] *Wairarapa Mercury*, 20 August 1873, 2.

[402] *Evening Post*, 27 May 1872, 2.

[403] *Wanganui Chronicle*, 17 September 1874, 3.

[404] *Wellington Independent*, 20 September 1872, 2.

to harvest and clear timber for the Crown, but also a practical manner necessitated by their surroundings.[405] Another correspondent stated that:

> the whole line of road for a distance of four miles is lined on both sides with neatly constructed residences, gardens are rapidly shooting up about them, bush is falling, and what only six weeks ago presented a wild, desolate forest scene is rapidly being metamorphosed into a picturesque villa interspersed at very frequent intervals by small rivulets of the most limpid water.[406]

Once more, a newly-constructed European settlement in the midst of heavily-timbered land had resulted in the complete removal of much of the forest and its resources in the area, replaced by small-scale cultivations, non-subsistence exotic horticulture, and flat land ready for conversion to pasture. Similar language was used to describe these developments in the Scandinavian settlements as was employed to describe the removal of the Three Mile Bush to the south, over a decade earlier, presenting the clear-felling of "a wild, desolate forest" as a conquest conducive to the introduction of European agriculture to the district. Overall, the construction of Dannevirke, Norsewood, and their companion towns cannot be separated from earlier developments in Wairarapa forest settlement in either an economic or political sense.

In a cultural sense, European settlers continued to characterise land in New Zealand by its ability to be used for agriculture following extensive clear-cutting of forest land. In this, the contents of the forest itself, including the specific types of trees, birds, and other resources that populated forest environments, became secondary to the prospect of land clearance with a view to pastoralism. A circular of 1852 written by Amos Gann, for example, advertised Wairarapa as "hilly and thickly timbered, but there is exceedingly fertile land ... capable of carrying large quantities of sheep and cattle."[407] The same document explains to European migrants that:

> the greater portion [of land] is covered either with fern, flax, or timber ... the cost of thoroughly clearing fern or flax land, varies from 20s up to £2 per acre, while

[405] *Evening Post*, 27 May 1872, 2.
[406] *West Coast Times*, 20 December 1872, 2.
[407] A. J. Gann (1852). *The New Zealand Emigration Circular for 1852*. London: Trelawney Saunders, 13.

> timber, or as it is called bush land, may require from £3 to £5 per acre, and even £10; but it is then more immediately and abundantly productive, and frequently the timber cut down goes towards reducing the expense.[408]

In this passage, reducing the amount of timber, flax, and ferns on any given plot of land is of paramount importance to the author; while the proceeds of cutting trees are a secondary benefit to clearing the land, it is not generally at the forefront of the colonist's mind when cutting "bush land." While kotukutuku and pōhutukawa are alluded to, their properties, beyond being evergreen, are not.[409] Indeed, whereas previous emigration guides had specified the benefits of felling certain types of tree (such as kahikatea and tōtara, though kauri is briefly mentioned), this circular neglects to mention any of the individual types of timber involved in the trade, implying that indiscriminate felling was advantageous to new settlers.[410] This sentiment is echoed in the circular's description of Auckland and its environs being cleared of forest: "The scythe has been as active in sweeping off the fern and the tea-tree ... Every day the land is being extensively and skilfully reclaimed."[411] Other handbooks intended for settlers in New Zealand followed similar trends in describing the uses of forest land resources, or lack thereof. A 'Settler's Guide' of 1857 simply describes Wairarapa as land containing "the finest sheep runs in the Northern Island," though it does warn of Wellington district by-laws that may prove obstacles to land clearance, such as the requirement that "agricultural establishments ... shall have reserves marked off of one-twentieth of all bush-land within the limit of such block."[412] Another treatise of 1863 was titled *Speed the Plough*, a clear indicator of settlers' intentions towards forest land at this time. The almanac, though evidently written by the Auckland district station operator Edward Wayte, is apparently authored by an anonymous "Old Colonist," which grants the author a perceived experience and authority to the prospective colonist, including authority over land resource management.[413] Intended for new arrivals in the colony, it asserted:

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[408] Gann, *Circular*, 21.
[409] Gann, *Circular*, 7.
[410] cf. "Impoverishing Effects of Burning New Land for the First Crop, from the *Colonial Farmer*." *Nelson Examiner*, 2 December 1843, 364; "The *Colonist." Nelson Examiner*, 17 December 1842, 163.
[411] Gann, *Circular*, 11.
[412] I. R. Cooper (1857). *The New Zealand Settler's Guide*. London: Edward Stanford, 90-98.
[413] E. Wayte (1863). *Speed the Plough, or The Colonial and New Zealand Farmer's Guide.* Auckland: William Atkin, 1.

> a very heavy bush is to be objected to, on account of the very large expenses attending the clearing of the same before you can prepare it for growing crops ... After the new colonist has chosen his land, the first thing that will present itself will be to fence and clear.[414]

This guide proposes two major uses for timber on land that has been designated for the settler's farm: firstly, as firewood, and secondly, as material for fences, although the author encourages the use of boundary hedges and poplar screens where possible.[415] Wairarapa is referenced once, as "large tracts of superior land," though this gives no information on whether the land is widely available for agriculture without clearance.[416] The handbook hints towards a low level of forest conservation and cultivation, if only for land value and building purposes: "a portion of bush" is portrayed as something that would carry secondary benefits to the farmer, "as the timber will always be found useful ... in fact, such would add materially to the value of your farm."[417] As well as this, the author cautiously advises that "it is a wise precaution to preserve such trees on the place as would afford a natural protection from high winds; but ... I have known many such trees destroyed."[418] However, throughout these handbooks, it is clear that the bush in New Zealand remained an obstacle to agriculture in the eyes of the typical European settler, and, at its most useful, merely a non-essential, secondary aspect of agriculture that posed very narrow benefits.

Other guides written for settlers had a similar outlook on forest land and its conservation, displaying some favourability towards the continued cultivation of certain native plants for specific purposes. An 1858 'Emigrant's Bradshaw,' also authored by Gann, instructed colonists:

> New Zealand is the land of greenwood. Vegetation runs riot ... adapted for every purpose of house and ship-building; the pūriri, or iron wood, equal in durability to teak or oak; the rata and the pōhutukawa, used for ship-timbers and

[414] Wayte, *Speed the Plough*, 5-8.
[415] Wayte, *Speed the Plough*, 7-8.
[416] Wayte, *Speed the Plough*, 132.
[417] Wayte, *Speed the Plough*, 6.
[418] Wayte, *Speed the Plough*, 9.

> wheelwright's purposes; the kohekohe, and others, used for shingles, split-stuff, and fencing; and the tōtara and a variety of fancy woods, adapted for general purposes, for furniture and turnery ... an important branch of colonial industry.[419]

This wide range of practices involving various indigenous trees continues with descriptions of various smaller plants, including tī kouka and harakeke, and their expected uses to colonists.[420] Gann also notes that "[New Zealand's] vegetable kingdom has received great extension by the introduction of exotics ... in many districts mixed up with the indigenous vegetation of the country," including "the ornamental Australian shrubs" and "our English trees," indicating that afforestation, in addition to clearance, might pose some benefit to settlers, in his view.[421] Gann's sentiments on native plants are again echoed in an 1863 chapter within a larger *Guide to Australasia*, connecting these ideals to a wider colonial world; the New Zealand chapter provides a brief guide on "clearing Wild Lands" but advises that:

> The uncleared forest, too, is both shelter and food for your cattle. They will get fat in it in the winter when those in the open country are perhaps dying from hunger and exposure ... moreover, you can always enjoy a real fireside without your happiness being alloyed by seeing visions of firewood bills in your coals.[422]

While this guide, similarly to *Speed the Plough*, advises the retention of some forest land on one's property, the bush also serves as an obstacle. For instance, the guide also states that "nearly all the wooded hills are well adapted for sheep feeding when cleared," and describes forested terrain as "useless" a number of times.[423] Cholmondeley, writing of Wairarapa in 1854, also advocated for the wholesale clearance of forest land, though considered it easier to achieve; the "difficult" land was "choked with stones, and infested by ferns, and prickly scrubs and brushes," though ideal for settlement due to its relative openness and lack of forest cover: "the enormous expense generally attendant on the breaking up of wild land for cultivation is avoided."[424] Articulating colonial economics,

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[419] A. J. Gann (1858). *The New Zealand 'Emigrant's Bradshaw': or, Guide to the 'Britain of the South'.* London: Edward Stanford, 14-15.
[420] Gann, *Bradshaw*, 16
[421] Gann, *Bradshaw*, 16
[422] S. W. Silver (1863). *Silver's Guide to Australasia.* London: Judd and Glass, 131-132.
[423] Silver, *Australasia*, 131-132.
[424] T. Cholmondeley (1854). *Ultima Thule, or Thoughts Suggested by a Residence in New Zealand.* London: John Chapman, 132-145.

including the profitability and prospects involved in committing to any given farming operation, is a key feature of this guide and those like it, contributing to a wider British capitalist worldview that pervaded early settlement. The themes present in these guides reveal agriculturalists' attitudes towards the "dense jangled underwood" of New Zealand that must be cleared for the land to be productive.[425]

The strategy of allowing native forest to remain on farmland amounted to a form of small-scale forest conservation among Europeans, and was widespread throughout the colony's European settlements; the journal of Charles Rooking Carter noted, in 1853, that settlement near forest remnants was a viable strategy at Palliser Bay:

> there was bush on the hills, and bush was shelter ... I found a fine clump of New Zealand laurels, not shrubs but laurel trees, with umbrageous tops, foliage ever green, and with fine large leaves, of a bright green dark colour ... [on] a high piece of table land, at the corner of which I ascended by means of a well-beaten pathway, and which brought me to the farmhouse of Mr C. Matthews [Onoke].[426]

Colenso, writing in 1855, also used the forest to aid in growing exotic fruit trees and crops, describing "the tall weeping willows with which I was surrounded" and "trees in the garden" present at his settlement in Ahuriri; another Wellington Province settler reported a similar arrangement.[427] In these accounts of Wairarapa's immediate surroundings, this usage of native forest resources represents an important aspect of settlers' ideologies in populating "forest in the back-blocks", where the cultivation of gardens on the edge of the bush could be equated with "farms emerged from forest" and "breaking the bush" in the sense of taming it rather than its outright removal. Carter's accounts of bush being used as shelter point towards a utilitarian perspective; forest resources were being kept not out of environmental or conservationist interests, but out

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[425] Silver, *Australasia*, 130.

[426] C. R. Carter (1866). *Life and recollections of a New Zealand colonist, no. II*. London: R. Madley, 89-93; P. Star (2008). "Tree Planting in Canterbury, New Zealand, 1850-1910." *Environment and History* 14, no. 4, 572.

[427] W. Colenso to J. D. Hooker, 23 February 1855, ATL Micro-Ms-Coll-10 Reel 15: E451, Alexander Turnbull Library, Wellington, New Zealand; A. Ludlam, papers, MS-Papers-9009-23, Alexander Turnbull Library, Wellington, New Zealand.

of concern for the economic and practical viability of colonial farming at the time.[428] By preserving "waste lands" in the interests of farming, the focus of some colonists began to shift from "destructive" clear-cutting of the bush to the "constructive" improvement of farms through the use of the forest as a resource beyond simple timber.[429]

Discussions of introducing exotic plants to New Zealand forests continued to dominate horticulture and agriculture across the colony between 1850 and 1874. A poem of 1853, written by the settler William Golder, directly addresses the perceived need of settlers to replace Wairarapa's native plants with European introductions:

> Those belts of forests, as they stretch along,
> Or isolated clumps which stud the wilds,
> Seem, as design'd to variegate the scene,
> And form a hedge to break the force of storms
> ...
> Though the foundation's laid,
> Man must put forth his industry to rear
> The structure to completion; and exert
> His energies to tame what may be wild
> To suit his purpose.[430]

The poem continues to praise McLean for "extinguishing the claims of native chiefs / By purchase!" to tame "these waste wilds" through the introduction of European pastoralism, including its plants and animals.[431] This poem exemplifies the then opinion of the general European public; that the "wilds" must be removed by any means necessary, and replaced by something more familiar to them. An 1865 guide by the botanist Alfred Ludlam, written concerning the wider Wellington Province, offered a more practical "solution" to the task of removing native flora: to "cut away the insides" of indigenous forests through the gradual introduction of exotic ornamental plants, as well as those useful for firewood

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[428] G. Wynn (1977). "Conservation and Society in Late Nineteenth-Century New Zealand." *New Zealand Journal of History* 11, no. 2, 135; Carter, *Life and recollections*, 89-93.
[429] Wynn, "Conservation and Society," 135.
[430] W. Golder (1854). *The Pigeon's Parliament: a poem of the year 1845, with four cantos, with Notes, to which is added, Thoughts on the Wairarapa, and other stanzas.* Wellington: W. Lyon, 98-99.
[431] Golder, *Pigeon's Parliament*, 99.

and construction.[432] Ludlam's guide specifies that native plants were generally useful, as Colenso and McLean observed, for constructing shelters for small-scale crop plantations and gardens; however, the guide also advises that they should "be entirely removed when they are no longer required [as] the planting of Coniferous trees among such a growth as this, would, in most cases fail". Following their removal, exotic conifers were recommended as "shelter plants".[433] The opinion of horticulturalists on the native bush changed little in the decade following: McEwin, writing in Auckland in 1873, also recommended that one "should leave clumps or belts of trees ... for shelter," before burning and replacing them.[434] One Wairarapa squatter, similarly, wrote of a land clearance strategy based on cattle "trampling the larger vegetation" prior to "invasion by grass and scrub species".[435] Native bush in Wairarapa was especially subject to these ideas. The presence of small pockets of intact bush land on sections of pasture was tolerated somewhat by European settlers in the brief initial period following 1850; due to the large amount of grassland and low scrub present in the district, stocks of timber were apparently kept as reserves to the extent that bush and mānuka on station land remained generally present in its pre-European state.[436] However, where "dense bush" was present, larger clearances of forest, as well as the introduction of larger plants such as those described in Ludlam's essay, certainly became prevalent among Wairarapa farmers; this would become especially evident following the establishment of the Small Farms Association, mere months after Golder's pastoralist tract was published.[437] The publication and popularity of guidebooks and essays on afforestation and land clearance display the extent to which settlers continued to view native bush as an obstacle to "development".

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[432] A. Ludlam (1865). *Essay on the Cultivation and Acclimatization of Trees and Plants*. Dunedin: Fergusson and Mitchell, 2.
[433] Ludlam, *Essay*, 2-10.
[434] A. McEwin (1873). "Bush Farming." In Chapman, G. T. (ed.), *New Zealand Settler's Handbook to the Farm and Garden*. Auckland: G. T. Chapman, 13-22.
[435] Gilling, "Lands," 55.
[436] R. D. Hill (1963). "The Vegetation of the Wairarapa in Mid-Nineteenth Century." *Tuatara* 11, no. 2, 87.
[437] Gilling, "Lands," 66.

J. Bragge (c. 1875-1876). *Panorama showing a ford over the Waiohine River, Greytown* [detail]. 1/1-000793-F, Alexander Turnbull Library, Wellington, New Zealand.[438]

Concerns about afforestation and its effects, however, also existed within European academia, albeit rarely. Joseph Dalton Hooker's *Handbook of the New Zealand Flora*, published in 1864, contains a small section admonishing the afforestation and the introduction of exotic flora by agriculturalists and land developers, with reference to Colenso's observations in Wairarapa.[439] Hooker expressed concern over the conservation and preservation of indigenous forest and scrubland environments, something clear in his characterisation of some settlers as "listless" or apathetic regarding native flora; he provides an example in that "the late Mr. Bidwill ... habitually scattered Australian seeds" on visits to Palliser Bay.[440] In a paper in *The Natural History Review*, also of 1864, Hooker explicitly highlights the introduction of forest in New Zealand, and condemns agriculturalists for their contributions to this:

[438] This photograph shows carriages attempting to ford the Waiohine River. Notable signs of "development" are present: telegraph lines, a cottage with a European-style garden, and a forest in the process of being felled are all visible in the image. (The trees in the foreground were likely felled by a storm, however.)

[439] Hooker, *Handbook*, 373.

[440] Hooker, *Handbook*, 757.

> Foreign trees are ... very luxuriant in growth. The gum-trees of Australia, the poplars and willows, particularly, grow most rapidly. In fact, the young native vegetation appears to shrink from competition ...[441]

Hooker's argument on the introduction of exotic species was "without success", by his own assessment, failing to gain traction among his fellow academics at the time.[442] Following his publications, scientific literature nonetheless continued to promote colonial expansion and the exploitation of the "economic botany" of New Zealand, reinforcing the idea that scientific concern about the conservation of indigenous flora did not extend far beyond Hooker's own writings.[443] While there is evidence for academic concern for the extinction of native flora among European observers, it does not appear that it was extensive among botanists or colonists as a whole.

The attitudes of those like Colenso and Ludlam regarding afforestation, however, were the prevailing forces behind the New Zealand Forests Act, enacted in 1874. The Act sought to limit the consumption and clearance of forest land resources "to achieve efficient exploitation."[444] Hooker's treatises on forest loss in Ceylon and New Zealand were cited as influences on the bill, although the Act itself would largely ignore his findings on exotic afforestation.[445] The Forests Act would not limit the clearance and afforestation of tree crops for any environmentalist reason, as Hooker had proposed, nor would it directly serve the interests of Māori in preserving their ancestral forest lands; instead, the Act sought to curtail waste from timber cutting, as well as the negative effects of indiscriminate clear-felling, such as increases in flooding.[446] The Act also failed to provide for the preservation of native timber stocks over exotic flora; in fact, the opposite occurred. During an 1874 session of Parliament, one member remarked that "wherever grass, clover, and European plants and animals find their way into the native bush, the forest begins to decay away, and soon assumes a ragged and desolate

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[441] J. D. Hooker (1864). "Note on the Replacement of Species in the Colonies and elsewhere." *Natural History Review* 13, 1, 123-124.
[442] Hooker, "Replacement of Species", 124.
[443] Colenso, "Botany," 39.
[444] Roche, *History*, 84.
[445] *New Zealand Mail*, 18 July 1874, 5.
[446] Pond, "Woods and Waters," 42.

condition," prompting a discussion of afforestation's role in preserving effective timber stocks and soil stability.[447] Another member mused that "I do not think the Government could enter upon a more useful work than that of creating forests by the judicious planting of trees," cementing that these new reserves should be subjected to afforestation measures.[448] Upon enaction, as a result, the act made "provision for the soil and climate by tree planting ... subjecting some portion of the native forests to skilled management and proper control."[449] Vogel himself, at the second reading of the bill, noted that such exotic planting was paramount in the construction of the Act: "I have frequently been surprised to find, on examining woods which had been planted some ten or twelve years, all the land under which had been considered dry ... wet spots, spreading wider and wider every year".[450] There were also major financial motivations for the Act, notably the use of forest land resources as security against Treasury loans; the forests would, in Vogel's view, become "dedicated to the purpose of extinguishing the national debt" through use as a "sinking fund".[451] Vogel's interest in preserving "sanitory resources," the promotion of the health of inhabitant of rural areas through conservation, would not greatly affect the contents of the Act.[452] In enacting the bill, the Crown would create large, dedicated reserves known as State Forests. Management of, and access to these areas was restricted according to a newly-established office of the Conservator of State Forests and its associated Department, led by the conservator of Indian forests, Inches Campbell-Walker, whose leadership was apparently influenced by a journey through the Pakuratahi and Remutaka forests in the Wellington Province.[453] Forests would generally remain accessible to European sawmillers and foresters, however, though would be more closely scrutinised than before the Act.[454] The Act, then, represented an unprecedented advance towards dedicated conservation efforts by the Crown, although it prized afforestation by exotic tree crops above the simple preservation of indigenous

[447] T. Bennon and L. Black (2020). "Claimant closing generic submissions environment." Wai 2180, #3.3.56, Waitangi Tribunal, Wellington, New Zealand, 17; Pond, "Woods and Waters," 42.
[448] NZPD, 1874, 19.
[449] NZPD, 1874, 419.
[450] NZPD, 1874, 84.
[451] NZPD, 1874, 92.
[452] Shultis, "Improving the Wilderness", 124.
[453] A. L. Poole (1956). *Captain Inches Campbell Walker, New Zealand's First Conservator of Forests*. Wellington: Forest Service, 7.
[454] Poole, *Inches*, 4-5; Pond, "Woods and Waters," 43.

flora. While such involvement certainly does not represent the establishment of a dedicated "conservation ethic" among Europeans, it nonetheless displays the scale and nature of forest preservation by Crown entities; enacted in fear of a decreased economic output by farmers, and as security against Crown loans rather than in the genuine interest of "sanitory resources".

J. Bragge (c. 1870). *Landscape, Rimutaka Range* [detail]. 1/1-000805-F, Alexander Turnbull Library, Wellington, New Zealand.

The Act received a mixed reaction from the European public of New Zealand. The *Lyttelton Times* printed that the Forests Act could be compared to "the end of the world," a "presumptuous profanity" that resulted in "the land fund of the whole colony [being] captured by the Colonial Government."[455] While dramatic, the *Times* was likely concerned with a perceived infraction on the freedom of European license-holders to cut timber where and when they pleased, in addition to depriving rural land occupiers of rent; prior to the introduction of the bill, an editorial in the same newspaper stated that "the licensees did not come to terms with the Commissioner about surrender," and that "a large slice of the pasturage rents of Otago and Canterbury might be impounded" by the

[455] *Lyttelton Times*, 6 October 1874, 2.

establishment of forest management measures.[456] An unnamed Wairarapa correspondent to the *Hawke's Bay Times* also stated some level of opposition to the Act, citing that "the scope of the Bill is very ambitious, and the purposed machinery too elaborate and cumbrous," and that "private enterprise will be checked; [and] that the Provincial heritage is to have rude hands laid upon it."[457] Generally, opposition to the Act concerned the rights of individual land-holders, or Provincial governments, to access and clear forested land at will, or with the permission of a license, rather than the considerably more daunting prospect of contacting the State Forests Department for approval. However, support for the bill – though decidedly conditional – certainly existed among European landholders. The *Canterbury Press*, re-printed in the *Hawke's Bay Times*, stated:

> the next session of the Assembly ought not to be allowed to pass without the enactment of laws to put a stop to the present reckless and stupid destruction of our trees, and to provide for the future shelter of the country either by encouraging private, or undertaking public, plantations.[458]

Similarly, the *Hawke's Bay Times*'s editor Robert Coupland Harding, an early European advocate both for native forest conservation and for Māori self-determination, independently stated his support for the bill, this time concerned with deforestation's effects on agriculture and horticulture:

> the destruction of forests led to irregularities of climate, causing seasons alternately of drought and of flood, resulting in denudation of the country by rivers and streams, and the loss of large tracts of valuable agricultural and pastoral land.[459]

Like the unnamed Wairarapa correspondent, however, Harding was pessimistic about the scope of the bill: he argued that the Act would be "a serious addition to the Colonial expenditure" and did not go far enough in preserving native forests, prompting him to state that he "should be sorry indeed to see Mr. Vogel's bill pass in its present shape, and

[456] *Lyttelton Times*, 31 July 1874, 2.
[457] *Hawke's Bay Times*, 28 July 1874, 302.
[458] *Hawke's Bay Times*, 10 February 1874, 112.
[459] *Hawke's Bay Times*, 28 July 1874, 302.

still more sorry to see it utterly rejected."[460] The *Wairarapa Standard* concurred, simply stating that "an Act on this subject which would be suitable for the Middle would not at present be so for the North Island."[461] Similarly, the *Evening Post*, based in Wellington, summarised that "it was a fallacy to suppose that the timber supply of the world was inexhaustible," but sarcastically countered that "[Vogel] represented New Zealand in a wild state with its forests to be more valuable than New Zealand well-peopled," and that debate should continue on the matter.[462] Clearly, public opinion on the Act was split between those who entirely opposed the bill, and those who opposed some provisions made in the Act for reasons of expense, freedom to exploit one's own land for resources, or that the Act had not made adequate accommodations for the forests of New Zealand or any one of its Provinces. As the writers of settlement handbooks debated the extent to which forest clearance should occur on one's own land, if at all, so did New Zealand newspapers and their correspondents debate the feasibility of afforestation, the establishment of State Forests, and the management thereof.

Over the span of a few decades, Europeans had expanded their programme of large-scale forest felling and establishment of timber industry throughout the colony, and these changes were no less evident in Wairarapa. Europeans throughout the district and its surroundings continued, in general, to exploit New Zealand forest land resources through the establishment of pastoral agriculture, the construction of roads, and the expansion of small-scale settlements in the region. In addition, there were numerous cultural elements that affected their continued usage of these resources; guidebooks, government advisories, newspapers, and other media tended towards further clearance of bush, adding to a broader colonial sense of cultivated land being "valuable". Forest clearance, from a social standpoint, became a method of "taming these waste wilds" where simple habitation of the land would not suffice. However, European resistance to the mass exploitation of forest resources did exist; academics, politicians, and economists warned, mainly from a financial viewpoint, of the negative consequences of neglecting to conserve forest land resources. At 1874, colonial government oversight of forest

[460] *Hawke's Bay Times*, 28 July 1874, 302.
[461] *Wairarapa Standard*, 18 July 1874, 2.
[462] *Evening Post*, 15 July 1874, 2.

resources had crystallised into the Forest Land Act and its associated actions, providing a Crown-backed measure to prevent the "destruction of forests" perpetuated by European land developments in previous years. Overall, European settlers continued to exploit forest land, and, while small-scale conservation efforts certainly existed, this exploitation tended towards the clearance and afforestation of native bush in favour of colonial development.

II: Māori uses of forest land resources to 1874

From 1850, forest land usage by Māori parties changed significantly. Forests continued to be greatly affected by the steadily increasing influx of European settlers, as well as the introduction of exotic plants and animals. Land sales to European settlers occurred in unprecedented numbers, especially in Wairarapa, causing shifts in population and in the techniques by which these populations continued to assert their connections to the whenua. With these influences, traditional food-gathering and settlement practices also began to shift dramatically. The use of surveying, pou whenua, and mana whenua became of utmost importance to Māori in navigating this rapidly changing land management situation.

J. Bragge (c. 1872-1875). *Five Mile Avenue, Forty Mile Bush*. D.000086, Museum of New Zealand Te Papa Tongarewa Collections, Wellington, New Zealand.

The land sales that occurred in Wairarapa and its close surroundings had the most immediate impacts upon Māori in the area. Commencing in 1851, Rangitāne and Ngāti Kahungunu began to sell many of their forested land possessions in northern Wairarapa and what would later become Hawke's Bay Province. The first of these major sales was that of the Waipukurau block, which was sold by Ngāti Kahungunu to Donald McLean in November of that year.[463] Not all of the forested land, nor its resources, within this block were exclusively signed over to European groups; a number of reserves were provided for in the agreement, most notably a large island in the Ahuriri Estuary, "the right to snare birds" in five hundred acres of forest at Puketitiri, and the Pukemokemoke forest reserve were excluded from the purchase.[464] Te Harawira, a Rangatira of Ngāti Kahungunu, noted that, during negotiations, he had also requested the reservation of Puketotara – a hill in Takapau upon which Horehore Pā was built – as well as an area of forest known to Harawira as "Te Pua-a-Hinemahanga," which constituted a bird hunting ground near Waipawa.[465] Forest land reservations within the area sold in the Waipukurau purchase were evidently of utmost significance to the parties who signed the agreement, a factor that Harawira was highly concerned with. Harawira, in the same correspondence, expressed frustration over McLean's refusal to outright state whether these sections of forested land could be reserved in the purchase, or at the very least surveyed:

> 'Ka tukua atu ki a korua ko Kawana, ma korua te whakaaro ki te wahi nona te oneone.' He pakeke hoki i penei atu ai ahau ki a ia mo te mahi a te Kuini i whakaritea mai ai ki a koe, kia ata takoto ai, mo ta te Atua tikanga hoki, kia tika ai te mea i pakeke ai mo ta matou whakatikatanga atu i te rohe. No konei i pakeke ai te kōrero. Ki te mea ka tuhi mai koe he pukapuka, ka rite kia eka ia.[466]

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[463] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 56-58.

[464] J. Cowan (1940). *Sir Donald Maclean*. Wellington: Reed, 63.

[465] Letter from Te Harawira to George Grey, 16 July 1851, MS-Papers-0032-0675F, Alexander Turnbull Library, Wellington, New Zealand.

[466] Harawira to Grey, 16 July 1851. (*'We leave it to you and the Governor to decide on the part for those who own the land.' I did this out of annoyance at him over the Queen's practice which you observe so that all is well settled, and according to God's will, and in order to put straight the ones who are stubborn over our setting the boundary. And that's why the discussion became difficult. If you write a letter, it will be in order to survey it.*)

Such an attitude indicates that forested land – and the gathering of food, such as birds and the natural productions of trees – remained an important part of life within Ngāti Kahungunu, an aspect that Harawira and his compatriots sought to preserve during land sales negotiations with McLean. This attitude is again, perhaps more strongly, reflected in an 1853 correspondence from a collective of the Ngāti Kahungunu landholders of Ahiaruhe, a block of land situated in South Wairarapa:

> Heoi na ano te wahi e tukua atu ki a koe ko Wairarapa, e kore e tukua atu Te Ahiaruhe ki a koe. Noku ake ano toku kāinga. Na, tenei ano taku tikanga, ko ngā kari e kore e tukua atu, kore rawa, kore rawa, kore rawa atu. Koi puta atu te tangata homai koe i au moni, inahoki he tokomaha ngā tangata nona taua kāinga... e kore e pai kia rere ki runga ki te puhi o te rākau noho ai.[467]

This letter reflects the aims of Wairarapa landholders more explicitly; while the land surrounding the area, which the surveyor Charles Pelichet had assessed as "generally poor, barren, and very broken," did not directly concern Māori living in Ahiaruhe, the prospect of European settlers purchasing the land "covered with fine timber" comprising their cultivations, gardens, and forests important for kai gathering was a major source of disquiet.[468]

The authors of this letter also make it clear that forested land at Ahiaruhe, "te puhi o te rākau," is a concept that cannot be divorced from the ideas of whakapapa and the descent of hapū, which they give as another reason that the block cannot readily be sold. The idea of forested land as a place of refuge was common among Māori at the time, including Ngāti Kahungunu and Rangitāne. In an 1893 hearing, Ngapaeruru-a-Matuahaka, a block of hilly forested land east of the Manawatu River, was also described as an ancestral place of refuge dating back to the time of Te Ruatotara, a wāhine of mana who

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[467] Wairarapa Māori to Donald McLean, 19 September 1853, MS-Papers-0032-0677B, Alexander Turnbull Library, Wellington, New Zealand. (*The only place that will be given to you is Wairarapa, Te Ahiaruhe won't be given to you. That is my own land. And this is my intention, that the gardens will not be given away, never, never, never at all. Don't let someone come and be given your money for that, because that land belongs to many... moreover, it is a small part that we are retaining and after all I have descendants, it would not be right [for our descendants] to have to fly up into the foliage of a tree to live.*)

[468] Charles H. Louis Pelichet to Donald McLean, 28 April 1852, MS-Papers-0032-0499, Alexander Turnbull Library, Wellington, New Zealand.

lived during the late eighteenth century.[469] Hanita Te Aweawe, representing Rangitāne for a part of the Māori Land Court hearing on the block, remarked that "this block was not lived on as it was mountainous, but it was a place of refuge."[470] Hoani Meihana, similarly, remarked "my father and Turaki never spoke of their right to go on the block. No one disputed their right ... Rangitāne generally went there. Never heard of any permanent settlements of Rangitāne on this block. They simply hunted and returned to their kaingas."[471] Areas of refuge in other locations were, on at least one occasion, marked by rāhui posts, and regarded as a reserved area of land by Rangitāne. At Mangatoro, for instance, a wooden pou whenua with "a curve like a bird's neck" represented a land use agreement between Rangitāne and the hapū Te Hika o Papauma, in doing so creating an area of neutral ground using direct references to the resources of the forest it encompassed.[472] Further north, at Tamaki-nui-ā-Rua, a large tōtara, named Te Taupa ki Heretaunga, represented a significant boundary between Rangitāne o Tamaki-nui-ā-Rua, Ngāti Marau, Ngāi Toroiwaho, and Ngāi Tahu ki Otawhao i Whenuahou, a prominent boundary defining the bounds of multiple important hapū. The destruction of this tree during the 1850s apparently resulted in "the perpetrators being ordered off the area," displaying the imperative of local hapū to keep this neutral ground.[473] The prevalence of such remarks regarding certain forests as positive areas of unoccupied land, wherein the right to use the land was generally disregarded in favour of treating it as neutral ground, can be directly contrasted to Te Hiaro's 1849 lament regarding Ngāti Kahungunu seeking refuge "among the roots of the big trees of the ancient forests," whereby retreating to the forest was seen as a universal signal of defeat; for at least some of Rangitāne, Ngāti Kahungunu, and the hapū of South Wairarapa, following the beginning of land sales, the forest clearly represented a safe haven rather than carrying negative connotations.[474]

[469] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 41.
[470] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 66-67.
[471] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 66-67.
[472] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 71.
[473] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 51.
[474] Goldsmith, "Medicine," 169-170.

In order to counteract alienation from traditionally-held land, a number of Māori forest landholders specifically demanded the right to continue mahinga kai and other land use practices even after land was sold. These rights to continued land usage under certain circumstances were significant; at Turakirae, for example, an 1853 land covenant created reserves "at the Patunga-a-Matangi, at the Wairongomai Bush, at Oahanga, at Hinakitaka for the Ngāti Tama residing there, [and] the right of eel-fishing in such places as are or may not be drained by the Europeans," wherein Māori who had traditionally used the land could continue cultivating, harvesting, and utilising forest resources. Nearby, the 1854 sale of Kahutara Block sought to reserve "all lakes, streams, creeks, and lagoons" for Māori use, though the courts would later nullify this clause.[475] More explicitly addressing the use of timber and plant resources, the agreement selling Whareama Block 2 stated that:

> the eel fishing is reserved to ourselves. Our cultivation is still to be reserved to us at Mangapiu as a cultivation. The firewood is to be used by Europeans as well as ourselves, a small piece at Waipupu Watakai and at Te Ruru to be reserved as cultivations for us, the firewood to be used by the Europeans and ourselves the firewood for us to be taken at such times as we are living on these cultivations.[476]

Similar provisions for the continued usage of timber existed at the Kaiwhata, Whareama, Ruataniwha, and Eastern Lake blocks, as well as during the less-official sales at "the entrance to the Wairarapa road" and "land on the Ruamahanga," among others, displaying a reluctance among Māori landholders to outright abandon the land and its resources following a single transaction, instead displaying a clear preference towards continued traditional use of forest cultivations and timber stocks.[477] From another perspective, these provisions may also have aided tangata whenua who wished to engage in the European timber trade.[478] Forest resources were also important to kaihaukai-based diplomacy between hapū, further increasing the level of incentive to keep their stock. Te Wereta, for instance, exchanged a small harvest from peach trees for (among

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[475] A. MacKay (1891). "Claims Of Natives to Wairarapa Lakes and Adjacent Lands." *Appendix to the Journals of the House of Representatives*, 1891, session II, G-04, 2-3.
[476] Goldsmith, "Wairarapa ki Tararua," 38.
[477] R. H. Wynyard (1854). "Message, no. 19". *Votes and Proceedings of the House of Representatives*, 1854, session II, 1.
[478] Roche, *History*, 61-62.

other resources) kūkū, pigs, and freshwater fish during this period, as a means of strengthening links with other hapū in the region.[479] The ubiquity of these provisions in Māori-written land transfer documents clearly displays the importance of retaining forest reserves, as well as the fact that Māori subsistence agriculture continued to be a significant part of life in the Wairarapa well after European settlement had begun. Furthermore, the absence of such provisions where these resources were either unavailable or exhausted illustrates the importance of forest flora and fauna throughout the period. While Frederick Weld had asserted "the woods are alive with kakas and pigeons" in the late 1840s, it is clear that this was not necessarily the case throughout the valleys.[480] Hine-i-paketia, a Ngāti Kahungunu wāhine of mana, gave up a significant portion of North Wairarapa land in 1850 due to the bird life having been extinguished beyond usability by European development.[481] Ani Matenga Te Patukaikino, sister of Te Hapūku, explained this viewpoint to McLean:

> as they were now waste [lands], the birds and usual food that rendered the land valuable have disappeared and let us have Europeans to enrich our country and bring goods for all old and young.[482]

Even with the widespread disappearance of indigenous wildlife, forest land resource provisions continued to be included in deeds, even within the same area as Hine-i-paketia had described. Te Hapūku, for example, advocated for "the old way" of land leasing and the establishment of continued-use reserves on the basis that it "would fill the land and the belly, not ... single-counting, which starves both," indicating some optimism for the recovery of the land to its previously valuable state, despite McLean's claims that the land merely consisted of "rotten trees and decayed vegetation".[483] The establishment of forest reserves and the reluctance to cheaply sell "waste land", then, is broadly representative of a tendency towards preserving traditional cultivation and gathering practices during this period.

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[479] Mair, "Wairarapa Protohistoric," 24.
[480] Anderson et al., "Wairarapa ki Tararua," 9.
[481] Gilling, "Lands," 56.
[482] Donald McLean, journal entry, 26 March 1851, MS-Papers-1232, Alexander Turnbull Library, Wellington, New Zealand.
[483] Donald McLean, journal entry, 18 April 1851, MS-Papers-1232, Alexander Turnbull Library, Wellington, New Zealand.

The creation of forested reserves did not, however, prevent the indirect consequences of European introductions of livestock and other animals. From 1853, European settlers began to purchase larger blocks of forested land to be cleared and subdivided in a concerted effort to establish small-scale farming communities in the centre of the valleys; the Wairarapa Small Farms Association, established the same year, entered negotiations with the Crown and subsequently acquired 35,000 acres of forest, which later formed the settlements of Featherston, Greytown, and Masterton.[484] Official purchases and reserves of forest land in this same area by Māori were comparatively small, totalling 292 acres at 1853, though this number would increase to around 9000 acres by 1862.[485] Along with the continued activities of the remaining squatters and leasehold pastoralists, this influx of European settlement and farming activities had a number of effects on indigenous vegetation, especially that which was useful to Māori. Most significantly, the introduction of exotic fauna threatened Wairarapa indigenous flora. By the beginning of the 1860s, wild pigs, rabbits, sheep, and cattle had become commonplace in the region; Tawhai's testimony, for example, documents the presence of "wild cattle and pigs" on Puketoi № 6, and wild rabbits were present in "plagues" throughout the Ruamahanga catchment area from at least 1863.[486] Exotic herbivores consumed a number of plants that were important to the continuation of mahinga kai; karaka, kapuka, tutu, tī kouka, and aruhe, particularly, became the targets of both wild cattle and those of squatters and European landholders. Moreover, cattle, pigs, and sheep tended to trample huruwhenua and kapuka as they grew, allowing for afforestation by various European grasses and native podocarps.[487] Seeds and flowers that had become attached to the fleeces of sheep also served as a medium by which exotic plants were distributed and introduced; rye-grass seeds, for example, were often deliberately spread in this manner.[488] One writer for *Te Karere Maori* wrote, in 1850, that the North Island was swiftly being overtaken

[484] Gilling, "Lands," 65.
[485] D Ellis, F. Small, and C. Innes (2003). "Māori Land Blocks in the Wairarapa ki Tararua District Inquiry: Acreage and Alienation Data from 1865." Wai 863, A070, Waitangi Tribunal, Wellington, New Zealand, 16.
[486] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 59; W. H. McLean (1966). *Rabbits Galore*. Wellington: Reed, 158.
[487] Gilling, "Lands," 55.
[488] Gilling, "Lands," 53.

by exotic grasses, though the presence of pigs was less detrimental and sometimes seen as a valuable food source:

> Kore e nui te mahi, ka tupu ake te tarutaru hei kai ma te pirikahu me era atu mea ... ko ngā wahi e haerea ana e ngā poaka tuoi, engari, me mahi, hoi nohoanga mo ngā poaka, me mahi he kai ma rātou kia we te nunui.[489]

Developments at Palliser Bay were decidedly slower in this regard; an 1850 report by New Munster Colonial Secretary Alfred Domett counted only five cattle in Māori possession throughout the South Wairarapa district, and in particular that very few inroads had been made by herbivores into the bush from Mukamuka to Orongorongo, that the area had "scarcely a blade of grass," that "the forest is dense," and, though "grass plains adjoining" were certainly present, Māori tended to value the preservation of nearby forest environments relatively highly and "have invariably refused to give them up".[490] By late 1871, however, the encroachment of exotic fauna into Te Taperenui-a-Whātonga had become evident to Māori, and, while afforestation of the region was not noted, the presence of invasive introduced animals was such that, in "te whenua mohoao" of the central forest, one writer from the Crown-aligned niupepa *Te Waka Maori o Niu Tirani* remarked that "he poaka, he kiore, he weka anake kei reira e haere ana."[491] Such statements, though flippant, can be taken as an illustration of the changes in biota that had occurred in the forest in the past decades; previously, Te Taperenui-a-Whātonga had been described as a place of refuge for Māori, thickly forested with indigenous plants, but now, as Ani Matenga Te Patukaikino stated, the forest was gradually being modified by exotic plant and animal life.[492] Forest reserves, then, may have been relatively ineffective at controlling the modification of forest land resources by Europeans, however indirect.

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[489] "Ko te Karere Maori," *Te Karere Maori*, July 18, 1850, 1. ('*Without a lot of work, the grass will grow for sheep and other animals to eat... The sections where the wild pigs travel, though, must be worked, as for pigs to stay there, they require food for them to grow.*')

[490] A. Domett (1850). "Reports, numbers 1-4." Supplement to the *Wellington Independent*, 31 August 1850, 3.

[491] "Tamaki." *Waka Maori*, 24 October 1871, 6. ('*in the savage land... there are only pigs, rats, and weka walking around there.*')

[492] Donald McLean, journal entry, 26 March 1851, MS-Papers-1232, Alexander Turnbull Library, Wellington, New Zealand.

The establishment of reserves was also a highly contentious subject within Māori communities, both as to whether these reserves were sufficient to sustain their continued existence on the whenua and as to the permanence or impermanence of these easements. At Tauherenikau and Taratahi, for example, Māori former landholders continued to use the land without restrictions even following its final sale, objecting to their abandonment of the land until reserve boundaries were more clearly defined, and the terms of their use elucidated. Ngātuere, who occupied land at Taratahi, asserted:

> kāore hoki kia rite ngā utu ki aku ano i karanga ai, no reira au i mea ai kāore ano kia marama ngā tikanga ruri whenua o ngā whenua e i hoatu ana kite Kāwanatanga ... engari kia marama rawa enei tikanga kino kia oti ngā raruraru, katahi ano ka whakaatu mai he tikanga ke.[493]

Ngātuere, here, explains the reasoning behind the perceivably uncooperative attitude that many occupiers took towards ill-defined reserve borders; that is, to continue to use forest land as they normally would, until the reserves' borders were made sufficiently clear.[494] Māori responses to the creation of reserves could also take more neutral forms, engaging with land transfer agreements in often unorthodox fashions in order to fully take advantage of the loosely-defined reserve 'system': on a 400-acre piece of land on the Ruamahanga River, Wī Kingi Tutepakihirangi and Manihera negotiated a sale for three shillings an acre under the pretence that they would re-purchase the land at a later date to be turned into a reserve for Matiaha Mokai.[495] The boundaries of this forest reserve were also strictly defined using trees as survey markers - "ki te 'rākau o tamaru' ... ko te Tōtara a Opaiwi" – further reinforcing Matiaha's proposed usage for the land following the purchase.[496] Similarly, a block of land at Matau-a-Maui, consisting of "very good land ... it had large areas without any bush on it, and easy access," had a single small, wooded reserve bounded by a forested ridgeline; while this would later be cleared, the practice of reserving forest land within a highly pastoral area

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[493] Ngātuere, "Reta ki te Karere", *Karere o Poneke*, 6 September 1858, 3. ("*the prices are not what I had asked for, so that is why I have said that the land surveying procedures of the land that was given to the Government are not yet clear to us ... but let these obstructive methods come to light until the problem is solved, then another method will be presented.*")

[494] Goldsmith, "Wairarapa ki Tararua," 62.

[495] Goldsmith, "Wairarapa ki Tararua," 60.

[496] Turton, "Deeds," 468. ('*from the 'Shady Tree'... to Opaiwi's Tōtara.*')

remains significant.[497] The practice of selling land with a stipulation that it could be purchased back in the form of a reserve was not uncommon in Wairarapa. This may have been done in order to obtain Crown grants to certain blocks or sections; this was certainly the case at Wairarapa Moana, which Raniera sold "under an understanding that he should have a Crown Grant for a block of land bounded by the Lake and Turanganui River on the one side, and inland by the Te Kope road to the coast."[498]

At Tamaki-nui-ā-Rua, similar concerns about the identification of the local forests with whakapapa and tūpuna were raised at a number of Rangitāne meetings throughout the 1850s and early 1860s. Tamaki-nui-ā-Rua, which contained vast swathes of Te Taperenui-a-Whātonga – the "Seventy Mile Bush" which covered most of Wairarapa from Pāpāwai to Taniwaka – and was significant to Rangitāne and Ngāti Kahungunu strategically, culturally, and economically due to its large reserves of timber, was a common source of contention among opposing Māori groups. Hoani Meihana, a leader with "great influence" among hapū within western and central Rangitāne, had been negotiating with both Europeans and Māori for some time by the end of the 1850s, in an attempt to consolidate the opinions and connections of tangata whenua.[499] Meihana was generally known as an educated diplomat among Rangitāne hapū, and is also mentioned in Ngāti Apa oral histories as a skilful negotiator; this is likely to have given him mana in the context of land resource sales and transfers, especially those as significant as that of Te Taperenui-a-Whātonga.[500] In 1852, Meihana assembled a number of kaumatua at Puketotara to compile a "history of the land," an act that would solidify claims to Te Taperenui-a-Whātonga between hapū and within the iwi itself. At some unspecified date soon afterwards, Meihana called another meeting of kaumatua to "discuss the leasing of land," specifically those previously discussed by Harawira. At

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[497] Turton, "Deeds," 503-504; Hippolite, "Wairoa," 10.

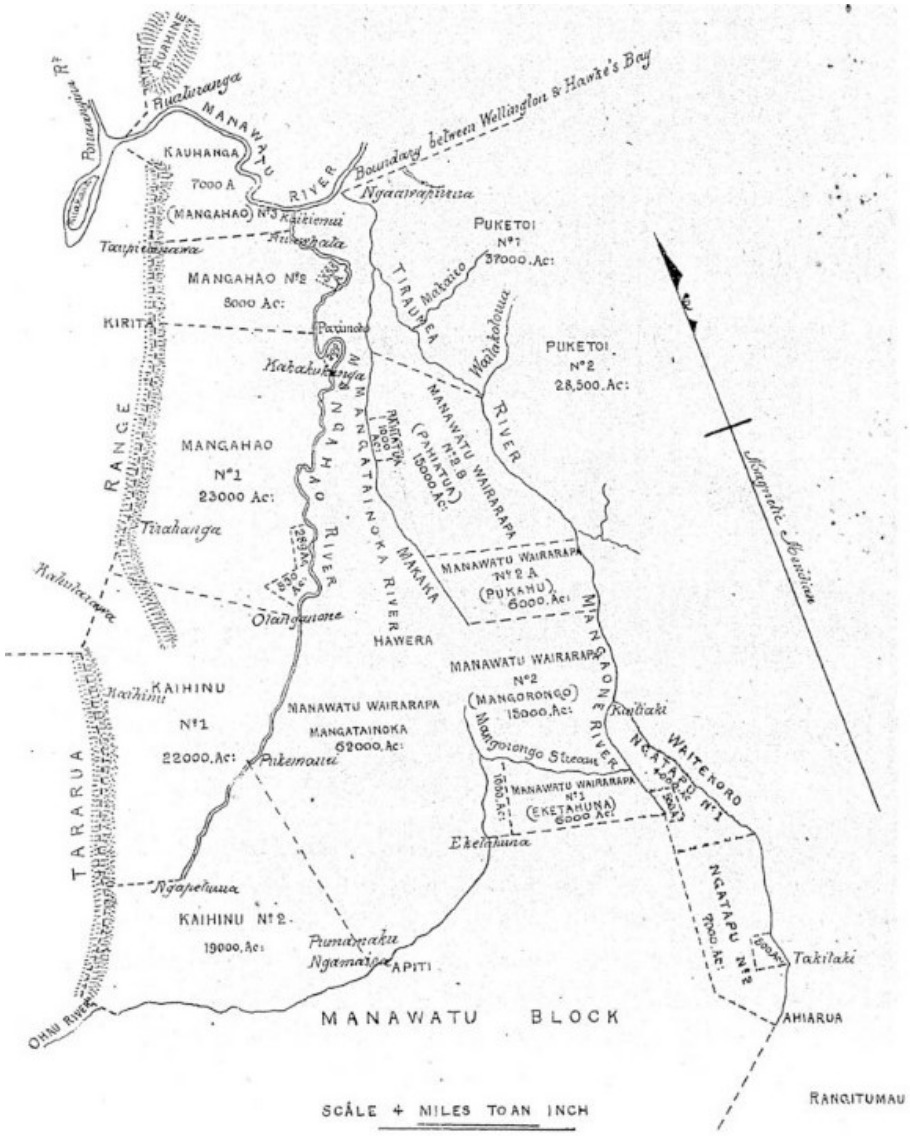
[498] Donald McLean to Andrew Sinclair, 7 September 1853,

[499] Thomas M. Cook to Donald McLean, 8 March 1860, MS-Papers-0032-0225, Alexander Turnbull Library, Wellington, New Zealand; *Appendix to the Journals of the House of Representatives*, 1854, session I, F-19,
2-3.

[500] Ministry of Education. (2012). "Kurahaupo patere". Ministry of Education, Wellington, New Zealand; Jones, K. L. (1994). *Ngā Tohuwhenua Mai Te Rangi: A New Zealand Archeology in Aerial Photographs*. Wellington: Victoria University Press, 167-181; Goldsmith, "Wairarapa ki Tararua," 442.

both of these meetings, whakapapa were extensively discussed and verified by members of the caucus; Aperahama Te Rautahi, a major landholder at Akitio, verified that the tipuna Rangitāne, as well as Whātonga (for whom the area was named), had held parts of the land in question, for example.[501] These proceedings display the high importance of forested land to Rangitāne leaders, who were greatly concerned with verifying ownership rights to land with high levels of timber resources such as this. While kaumatua present were reported by Meihana as "not being in opposition re the leases," it is clear that they nonetheless placed a great emphasis on the land tenure of Te Taperenui-a-Whātonga, displaying the unique spiritual and ancestral connections that they had with this forested land; in the words of Wī Matua, who attended a meeting at Porangahau, "natives know all the marks on their own lands ... thorough knowledge of the land implies long residence".[502]

[501] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 57-58.
[502] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 57-59.



Paul Goldsmith (1996). "Wairarapa District: Seventy Mile Bush, 10 Oct. 1871," from "Rangahaua Whanui District 11a: Wairarapa (Working paper, first release)." Waitangi Tribunal Inquiries, The Waitangi Tribunal, Wellington, New Zealand.

Outside of Meihana's investigations of Tamaki-nui-ā-Rua, other statements of ancestral habitation and spiritual connection to forested land reflected its great importance. Hori Herehere Te Rangiwhakaewa, another high-standing member of Rangitāne, recalled the urupā at the forest near Mangatoro Stream and those buried there:

> [At] Poho-o-Niwaniwa ... Te Rangiwhatatiri and his elders were buried there. They were of my hapūs. Te Ruawhenua was another. Ngapera and Ririto were buried there. They were children of Te Rangiwhatatiri and Te Hokitonga.

> Ngapira was another. Ngotai and her relatives by marriage were buried there. Ngotai was of Ngāti Parakiore.[503]

Herehere was also well-versed in the locations of pou whenua throughout the area. Moreover, in a letter to George Grey, Te Otene Meihana justified his persistence in pursuing payment for land lease transfers at Waitōtara by stating "e hoa, e totohe tonu ana ahau ta te mea ko au te putaketake o te whenua, tēnā ko rātou he pīkari rātou ki runga i te whenua."[504] The ancestral right to forest resources at Waitōtara, then, was paramount to tangata whenua. At Moananui, an 1857 missive documented a conflict surrounding a firewood-harvesting boundary marker at Te Taperenui-a-Whātonga:

> the said pole is of course a terrible eyesore to [Te Hapūku]'s people, and some of the wild old warriors express in the most determined way their intention of cutting it down. This will try the pluck of the others. If they resent the insult, the war begins...[505]

The hapū of Wairarapa, throughout the decades following 1850, were heavily connected to forested land through long-held records of ancestry and inter-tribal relations, and information was generally available regarding this on an individual level.[506]

Occupation of forested land throughout Wairarapa during this period continued to be characterised by scattered habitation and a few centres of settlement within the region; these settlements, in turn, were heavily defined by mana and whakapapa. At an 1890 partition hearing at Kaitoki – a block which had also been discussed at Hoani Meihana's meetings throughout the 1850s – several residents and labourers gave evidence for the long-term use of Puketoi Block, a forested area on the edge of a small mountain range. Timber harvesting and its effects on the land were at the centre of this examination. One former resident, named as Tawhai, stated:

> I had a house there and cultivated there. I also leased the central portion of the land on the western boundary ... for tōtara timber. I ceased cultivating on this

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[503] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 60.

[504] Te Otene Meihana to George Grey, 21 February 1851, MS-Papers-0032-0675B, Alexander Turnbull Library, Wellington, New Zealand. (*Friend, I still persist because I have the ancestral claim to the land, and they, they are mere chicks on the land. Now, the claim on the land is from my ancestors.*)

[505] *New Zealander*, 19 August 1857, 3.

[506] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 60.

> land in 1874 ... I have also shot birds on this land and wild cattle and pigs - and caught eels.[507]

Traditional methods of cultivation and food gathering from the forest, including the trapping of kūkū and tuna, evidently endured throughout this period. Moreover, timber gathering was apparently restricted to European-leased portions of land, indicating some level of concern regarding resource conservation. A European settler named Robert Smith observed that, prior to 1874:

> I have seen camping whares on this land. The peach trees are outside this land near the Mangatoro stream. I have cut timber near the Mangatoro stream ... They used to shoot pigeons on this land, and huias. There was a track on the northern boundary.[508]

Smith, notably, describes a form of traditional Māori forest land usage incorporating European tree crops. "The peach trees" continued to be used under the general scope of mahinga kai throughout the remainder of Māori occupation on the block.[509] Other witnesses to the use of Puketoi № 6 observed similar traditional methods of land use and occupation. Hori Herehere recalled that there were several forest settlements on the Puketoi block: Whawhapo and Poho-o-niwaniwa were settlements dedicated to the seasonal round of forest resource gathering, which was universally managed by observing rāhui, tapu, and noa. The area near Poho-o-Niwaniwa also housed several urupā, reinforcing whakapapa's importance among these scattered centres of habitation.[510] Clearly, traditional methods of forest land management were still paramount to the hapū at Puketoi, providing resources vital to subsistence farming and gathering; while European land use nonetheless affected the block, the remaining Māori population at Mangatoro continued to observe historical environmentally-centred traditions.

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[507] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 59.
[508] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 59.
[509] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 59.
[510] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 59.

Burton, W. and Burton, A. (c. 1860s-1870s). *near Masterton, Wairarapa* [detail]. 2007P_Mv35_RTL_0836, Manawatū Heritage, Palmerston North, New Zealand.[511]

The disruption of traditional forest land use practices eventually led to significant political and social unrest across the rohe. The development of roads and railways through Te Taperenui-a-Whātonga fomented considerable dissent among Māori, particularly the Rangatira Wī Waka and Ngātuere, alongside the lack of payment for other blocks of land throughout the Ruamahanga catchment area. Ngātuere and Wī Waka, both supporters of the newly-formed Kingitanga movement in 1860, sought reparations for the non-payment of koha and the Crown-guaranteed five-percent transactions on transferred Māori land; moreover, Ngātuere and the broader Wairarapa substrate of the Kingitanga movement were concerned with the ability of Māori to continue traditional activities in the region.[512] Ngātuere explained these motivations at an 1860 conference at Kohimarama, wherein he responded to McLean's claims that the Kingitanga movement was "completely ignorant":

> Ministers were first to come to Wairarapa; they brought us Christianity; and they taught us to forsake the old customs; they pulled up by the roots the Māori customs, and they became quite dry. The next thing that came to us was the

[511] This image depicts a number of raupō whare and storage buildings within forested land, probably near Pāpāwai. Sheep and cattle are also visible towards the buildings (although blurry).
[512] Gilling, "Lands," 123.

practice of leasing land, and we all ran after this new thing; this land has been the cause of all our troubles ... Kill right out this quarrel; let it be quite finished.[513]

Here, Ngātuere places land resource use at the centre of his dissent against the Crown, a theme that would continue throughout this period of agitation. According to Church Missionary Society missionary William Ronaldson, active at Pāpāwai, Māori had been generally unsatisfied with compensation for land transfers since at least the 1850s, but this dissent had not yet shifted to conflict due to "the great esteem in which [McLean] is viewed by the Natives at large" – that is, they retained some confidence in the Crown to pay them in full.[514] As early as 1857, opposition to further purchases or development on forest blocks making up Te Taperenui-a-Whātonga south of Tamaki-nui-ā-Rua had become evident to the Crown; District Commissioner George Sisson Cooper wrote that "I am inclined to think that they will object to treat for the sale of the Bush lands ... [they] remain unsatisfied by the Government."[515] By 1860, this dissatisfaction had crystallised into a wider movement of protest against further developments in "lands over which the Native Title has not been extinguished."[516] Illustrating the heightened dissent, Wī Waka and Karaitiana Te-tua-o-te-Rangi Te Korou, who had also attended the Kohimarama conference, jointly proclaimed that "our lands are sold to [the Crown], but we have not yet received the payment, and we have become like dogs through waiting for the price of our lands."[517] A campaign of forest-based civil disobedience followed. The road through the recently-acquired Te Taperenui-a-Whātonga at Tamaki-nui-ā-Rua, an important "means of passage" for European goods, was disrupted by dissidents from the Kingitanga movement (largely Rangitāne), who blocked traffic specifically where trees had been felled to create the new highway; the protesters also aimed to divert traffic away from Māori land at Te Oreore.[518] Protesters also removed a potato plantation nearby, apparently due to a minor internal conflict within the movement over modern

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[513] "The Native Conference at Kohimarama." *Lyttelton Times*, 28 July 1860, 3.

[514] William Ronaldson to the Church Missionary Society, 27 December 1860, qMS-1720, Alexander Turnbull Library, Wellington, New Zealand.

[515] George Sisson Cooper to Donald McLean, 29 March 1857, *Appendix to the Journals of the House of Representatives*, 1862, Session I, C-01, no. 29.

[516] *Appendix to the Journals of the House of Representatives*, 1863, Session I, E-03, no. 5.

[517] M. O'Leary (2002). "Ngā Take Motuhake a Rangitāne: Rangitāne, the Crown and the alienation of the Wairarapa ki Tamaki-nui-ā-Rua rohe." Crown Forestry Rental Trust, Paekakariki, New Zealand.

[518] Wardell to Native Minister, 3 October 1863, 88-103-4/08, Alexander Turnbull Library, Wellington, New Zealand.

agricultural methods.[519] Forests and traditional cultivation were, then, important to the Kingitanga and their allies; while economic reasons were the catalyst for the campaign, Ngātuere's comments on the eradication of mahinga kai and land alienation show that a traditionalist ethos was a significant part of their dissent. State reports on the campaign noted both economic and ideological reasons for the continued protests:

> he uaua no Rangitāne kite tono kia nui he utu mo te whenua e takoto ai te rori ... otirā he iwi kuare a Rangitāne, he iwi mohoao no ro ngahere; kāore e mōhio ki ngā tikanga u a rātou. E ngaro ia nei a Ngātikahungunu, tana whakaaetanga ki ngā rori o Ahuriri. Hohoro tonu ia te whakaae kia mahia ngā rori o tona kāinga — he iwi mōhio hoki.[520]

In this, Rangitāne dissent against the seizure of forest land is equated to their cultural attachment to the forest, as well as a perceived lack of understanding over land usage rights. The specific epithet given to Rangitāne in this article – "he iwi mohoao no ro ngahere" – also references Ngātuere's ideas of returning to "old customs" of mahinga kai and residence "at the end of the bush".[521] Ideas about traditional occupation of forest land, as well as the conservation of the forest itself due to Māori interests, were displayed prominently during this period of protest at Te Taperenui-a-Whātonga, demonstrating the continued prominence of a "conservation ethic" into the 1860s.

Nonetheless, some leaders appeared more neutral on the issue of Crown acquisitions of forest land, indicating that Ngātuere's dissent was far from universal; moreover, some Māori workers were employed in European forest felling and milling during this period.[522] Acquiescence to Crown purchases generally occurred because of external pressures and events, or a mislabelling of the actual ownership of the property in question. The Mangatainoka block, the largest such division of Te Taperenui-a-Whātonga, was originally designated as a Rangitāne reserve throughout the Tamaki-nui-ā-Rua

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[519] Gilling, "Lands," 123-124.

[520] *Waka Maori*, 21 October 1865, 39. ('*it is difficult for Rangitāne to ask for enough reward for the land on which the road will be constructed ... but Rangitāne are an ignorant people, a savage people from the forests; they know not how to [collaborate]. Ngāti Kahungunu have hidden here their right to use Ahuriri roads. No, they were quick to agree to the construction of roads in their kāinga; they are an intelligent people.*')

[521] *Waka Maori*, 21 October 1865, 39; Anderson et al., "Wairarapa ki Tararua," 458.

[522] *Waka Maori*, 21 October 1865, 39.

transaction until August 1871; however, the land was arranged to be sold by March 1873, when Te Hiaro, Te Peeti te Aweawe, and Hoani Meihana signed an agreement to be paid an advance fee for Crown development on the block.[523] James Grindell of the Land Purchase Department evaluated the land as "most excellent; the land is perfectly level, heavily timbered, and never flooded ... its acquisition by the Government is of utmost importance."[524] Crown Lands Commissioner John Marchant, though sceptical, conceded that its stocks of timber were significant: "some of the sections contain flat, some undulating, and others broken land ... generally covered with heavy mixed bush, but there are patches of white-pine and mānuka scrub."[525] This "lucrative" forested land was culturally significant to Rangitāne; Meihana reportedly:

> said it was the last block of land of any extent which they had left;– their dead were buried there; it was endeared to the people by old associations, and it would require time to remove their prejudices against parting with it.[526]

Ancestral connections to Mangatainoka block were deep-seated; Whātonga – for whom the forest was named – and Rangitāne, the ancestors of Ngāti Moe, Ngāi Tara, Ngāti Hotu, and, more broadly, Rangitāne o Tamaki-nui-ā-Rua, had occupied the block around five hundred years earlier, according to Meihana himself.[527] Moreover, Mangatainoka continued to experience traditional forms of occupation even at this point; an 1880 survey of the block noted a number of occupied pā sites and kāinga alongside mahinga and mara kai, indicating that the site remained a significant place of forest land resource use.[528] An article of 1871 following the sale simply stated: "ehara ena kōrero i te kōrero e tau ana mo te nupepa, ehara i te kōrero e mate nuitia e te tokomaha o ngā tangata o te motu."[529] In spite of this, Grindell reported that Rangitāne public opinion on the matter was strongly in favour of selling the land, and that Meihana highlighted the value that

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[523] Goldsmith, "Wairarapa ki Tararua," 92-93; O'Leary, "Rangitāne," 54-55.

[524] James Grindell to Minister for Public Works, 31 May 1872, *Appendix to the Journals of the House of Representatives*, 1873, Session I, G-08, no. 41.

[525] J. W. A. Marchant, H. J. Lowe, and C. T. H. Brown (1887). *Plan of Mangatainoka, village/special settlement*. Wellington: General Survey Office.

[526] James Grindell to Minister for Public Works, 31 May 1872, *Appendix to the Journals of the House of Representatives*, 1873, Session I, G-08, no. 41.

[527] Parsons and Ropiha, "Tamaki-nui-ā-Rua," 14.

[528] R. O'Brien and R. McClean (2001). "Environmental Issues Overview Report for the Tararua District Scoping Report." Wai 863, A058, Waitangi Tribunal, Wellington, New Zealand, 20.

[529] *Waka Maori*, 2 December 1871, 11. ('*This discussion is not a discussion worthy of newspapers; it is not news that people across the motu are dying to hear.*')

would be added with the proposed construction of a railway and European township on the whenua.[530] In support of this view, *Te Waka Maori* published an article in late 1871 in favour of selling the land at Tamaki-nui-ā-Rua:

> Ko tēnā whenua he whenua takoto kau o mua iho, kāore e mahia ana, kāore he mōmonatanga e kitea ana, ko ona tangata ruarua nei e noho mohoao noa iho ana—tana mahi he whakangau poaka, he wero manu, he kai i te ureure kiekie, he keri aruhe, he hamoemoe noa i te ra. Na, mea ana te Kāwanatanga kia whakarangatiratia taua whenua, kia whakanohoia kite hunga mamahi kia tupu ai he hua i te koraha, kia rangona te waha tangata te waha tamariki ki ngā wahi e rangona ana inaianei ko te ngongoro anake o te poaka mete tangi a te manu.[531]

The article also implies that mahinga kai practices were seen as a lower-class activity performed only by mohoao ("savages"), which may have been another contributing factor to changes in Māori public opinion on forest land resources. Meihana's revised view on selling such important land was likely informed by this shift. Another writer displayed optimism about the ability of Māori to continue their cultural practices on transferred land: "he mea pea kia noho tonu te motu i roto i ngā ritenga o te Māoritanga ote tangata o mua."[532] The cutting of ties at Mangatainoka was not made without duress, however. The sale of the block was also heavily influenced by local hapū being affected by recent flooding along the river, which would have reduced their seasonal harvest significantly.[533] The most recent incident, at the time the advance fees were paid, was the September 1871 flooding of the river, which prevented the Rangatira Nireaha Tamaki a Hamua from attending a session of the Native Land Court at Pāpāwai.[534] While the river was susceptible to flooding in previous years, annual flooding events were exacerbated by European forest clearance to the south and west of the Mangatainoka River.[535] Internal

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[530] James Grindell to Minister for Public Works, 31 May 1872, *Appendix to the Journals of the House of Representatives*, 1873, Session I, G-08, no. 41.

[531] *Waka Maori*, 2 December 1871, 11. ('*This land was once a wasteland, uncultivated, infertile, its few inhabitants following a savage lifestyle of hunting pigs, shooting birds, eating wild game, digging up aruhe, and snoozing in the sun. Now, the Government will enrich this land, so that groups will settle here and grow things in the wilderness, that the sounds of people and children can be heard in places where, at present, there is only the oinking of pigs, and the singing of birds*.')

[532] *Waka Maori*, 2 December 1871, 11. ('*it is possible for those within the district to retain the traditions and cultural heritage of our predecessors*.')

[533] O'Leary, "Rangitāne," 54.

[534] O'Brien and McClean, "Environmental Issues," 22.

[535] O'Brien and McClean, "Environmental Issues," 22.

economic disagreements among Rangitāne further problematised the matter, though these were resolved relatively quickly.[536] Altogether, despite these factors, the sale of Mangatainoka represents an important change in Māori attitudes towards selling ancestrally-important forest land resources. Traditional forms of occupation were significant to tangata whenua of Mangatainoka block, and mahinga kai continued to be practiced even throughout the process of land transfer on the land; however, economic concerns among Rangitāne hapū, by this point, were evidently enough to shift political attitudes towards forest land resource alienation towards acquiescence or neutrality in this case.

J. C. Crawford (1863). *Maoris cutting a road through Manawatu bush.* E-172-040, Alexander Turnbull Library, Wellington, New Zealand.

Mahinga kai practices on forested land, while distinctly continuing in various forms throughout the later nineteenth century, began to decline from their previous widespread status. The testimonies of some inhabitants of Puketoi, for example, towards the boundary with Mangatainoka, describe that, aside from occasional hunting activities, there were very few Māori using the forest to gather food, instead either choosing to abandon the land altogether, or supplant traditional cultivations with European pastoral agriculture on cleared land.[537] Nireaha Tamaki, who retained land at Puketoi and

[536] O'Leary, "Rangitāne," 55.
[537] Gilling, "Lands," 54.

Mangatainoka during the period of land purchases, reportedly cleared forest land for use in farming wheat and cattle following the settlement of Europeans nearby; other Rangitāne tangata whenua found employment as forest guides and ferry operators at the confluence of the Mangatainoka and Manawatu rivers, occupations that generally relied on a steady presence of European settlers in the area.[538] Another witness reported that his family had ceased mahinga kai practices at Mangatainoka prior to 1853, but occasionally ventured there to hunt pigs, kūkū, tuna, and kiore.[539] Testimony from other landholders put forward the idea that the Range was entirely unoccupied, though bird resources remained present.[540] By 1874, then, a significant proportion of Rangitāne o Tamaki-nui-ā-Rua at Puketoi were engaging in "settled cultivation" activities rather than traditional land resource use, occurring due to changes wrought by European settlement. Overhunting and environmental changes had recently caused the complete local extinction of the titi, for example, and other species, such as huia, were increasingly rare.[541] Furthermore, it may have proved more economically viable for hapū to switch to a more sedentary food production model with the introduction and widespread adoption of European cereal crops.[542]

However, claims of the complete abandonment of the Puketoi Range were likely embellished during Land Court processes. Occupation of Puketoi in a traditional manner certainly continued; at Tutaekara, in 1885, an occupied pā was documented by surveyors, and settlers noted that Māori "did not wish to part with their best food producing area. They relied on water, eels, and pipis from the rivers and their kumara ... and birds from the bush."[543] A well-maintained bridle path through the bush also existed at 1880, displaying that there was at least some continuous traditional occupation in the area.[544]

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[538] Rangitāne o Wairarapa, Rangitāne o Tamaki-nui-ā-Rua, Rangitāne Tu Mai Ra Trust, and New Zealand Government (n.d.) "Deed of Settlement Schedule: Documents" (legal report), Waitangi Tribunal, Wellington, New Zealand, 4.

[539] Anderson et al., "Wairarapa ki Tararua," 824.

[540] Gilling, "Lands," 54; S. Oliver (2004). "Tararua District Environmental Issues Report." Wai 863, A035 Waitangi Tribunal, Wellington, New Zealand, 29.

[541] Gilling, "Lands," 54-55; Oliver, "Environmental Issues Report," 29.

[542] Anderson et al., "Wairarapa ki Tararua," 824.

[543] C. J. Carle (1980). *Forty Mile Bush*. Woodville: North Wairarapa News, 110.

[544] Carle, *Forty Mile Bush*, 110; ChanceryGreen (2011). "Archaeological Assessment: Puketoi Wind Farm" (technical report). ChanceryGreen, Auckland, New Zealand, 14.

By 1871, opposition to European development in the Puketoi forest was such that the route of a proposed railway line had to be changed. Grindell, for example, noted that the Rangatira Wirihama Kaimokopuna was extremely hesitant to sign any land transfer documents relating to the sale of the bush.[545] While mahinga kai and traditional subsistence cultivation on the Puketoi forest land certainly experienced some form of decline, representing a trend throughout the entire Wairarapa, some occupation in this manner clearly endured up to and including 1874. Although the increasing popularity of pastoralism and ecological changes in the region displaced a significant amount of forest-based traditional occupation throughout the period, Māori continued to use forest land resources for hunting, food gathering, and settlement.

Māori throughout the archipelago also engaged with European governmental efforts towards forest land conservation, including the New Zealand Forests Act of 31 August 1874. As previously noted, the Act restricted development and exploitation of certain areas of forest, which were to be designated "as the General Assembly shall ... from time to time determine," and included areas under lease as well as reserves of forest land that had been previously marked.[546] Across the motu, reception to the Act among Māori and Māori language newspapers was mostly positive, although considerable discussion existed on the matter. Robert Coupland Harding's Te Reo column in the *Hawke's Bay Times* reported on Crown discourse surrounding the Act following Vogel's initial proposal, albeit in a different light than he had done in his English columns, as such presenting several political views on the matter. The paper cited the "mohiotanga nui" of Julius Vogel in conserving forest lands, especially in Otago and Canterbury, which had previously instituted tree planting ordinances to varying extents; Harding (and, likely, Ngāti Kahungunu co-authors) elaborated:

> no te mea, he kore ngahere i ngā parae o Katapere, i putoti ai te tupu o ngā kai o era wahi, a i tae kite kai kore i ngā ra e hauhakea ai ngā maara o taua takiwa.[547]

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[545] Goldsmith, "Wairarapa ki Tararua," 88.

[546] New Zealand Forests Act 1874, articles 6-7.

[547] "Ngā Hua o te Mohiotanga ma ngā Tangata Maori," *The Hawke's Bay Times*, 7 August 1874, 315. ('*from the fact that there were no forests in the fields of Canterbury, the growth of crops in that area was stunted, and there was no food from the harvests.*')

A common theme among Harding's published statements of support for the Act was the idea that forest conservation would benefit the lives of the descendants of tangata whenua as well as those who occupied the present; the *Hawke's Bay Times,* in brief, presented the statement that "ka tino whakapai a [tatou] uri, ki ngā tikanga o taua ture,"[548] Opposition to the Act, as depicted in the *Times*' summary of discussion, generally surrounded the idea that the law solely existed for the Crown to supersede lease agreements in the pursuit of profit at the expense of Māori lessees. Harding also noted Manawatu politician Walter Woods Johnston's statement:

> i whakahe ano hoki aia kite ture hou mo ngā ngahere, he mea hoki nana, ki tana whakaaro, ko ngā tikanga, o taua ture, he tikanga kohi moni ma te Kāwanatanga.[549]

This view highlights one popular opinion held by Māori concerning the Act; that it would simply divert the earnings of tangata whenua within forested areas into Crown hands, a concern similar to that of Ngātuere at Te Taperenui-a-Whātonga.[550] The presentation of multiple views on the Forests Act reflects, to an extent, the significance of the Act to Māori at the time. Outside of the *Times*'s coverage, a number of Māori articulated their varying opinions on the matter; to the Superintendent of Auckland Province, who had pre-emptively forbidden European forest clearance in the area. Inward correspondence to the Superintendent asserted "with [Māori] alone is the control of our land," placing tino rangatiratanga at the forefront of the issues presented by the Act.[551] Another writer submitted: "I would not depart from any arrangement, nor will I alter my previous thought until the termination of the period agreed upon," concerning previous timber-cutting agreements, showing a clear economic basis for opposing the Act.[552] Other authors sought to highlight, as Harding had, the importance of preserving natural resources for future generations. One letter, apparently instigated by Vogel's initial speech on the matter, stated that "ko tenei whenua kua whakaaturia atu nei ki a koe hai

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[548] "Ngā Hua o te Mohiotanga ma ngā Tangata Maori," *The Hawke's Bay Times*, 7 August 1874, 315. ('[*our*] *descendants will benefit greatly from the practice of this law.*')

[549] "Ngā Hua o te Mohiotanga ma ngā Tangata Maori," *The Hawke's Bay Times*, 7 August 1874, 315. ('*he disagreed with the new law on forests, because, in his opinion, the practices of that law are a means of collecting funds for the Government*.')

[550] Pond, "Woods and Waters," 41.

[551] Pond, "Woods and Waters," 41.

[552] Pond, "Woods and Waters," 41.

whenua tuturu mo a matou tamariki," stressing the importance of retaining forest land resources either by rāhui or Crown proclamation for the sake of landholders' descendants and the continuation of traditional ways of life.[553] A letter to the editor of *Te Waka Maori*, in support of the Act, echoes this sentiment:

> I entirely approve of protecting and preserving forests. It has ever been considered an important matter amongst the Māoris, from the time of our ancestors down to the present time ... In the present day the birds are but few, and the kākā and the kākāriki have almost disappeared ... These pretty birds, harbingers of the year, where are they?[554]

In this, the preservation of forest land for its flora, fauna, and the spiritual connections that Māori have with the whenua itself are promoted; moreover, the writer highlights the use of traditional methods of forest living as something that should be continued, a situation that the Act could bring about. The Forests Act of 1874, in this way, represented a conservation effort to which Māori could widely engage within the confines of Crown and parliamentary discourse. The diverse range of viewpoints and ideas associated with the Act display its significance in the eyes of Māori across the motu, who related to it from economic, spiritual, and cultural standpoints.

Throughout the decades leading up to 1874, then, Māori throughout Wairarapa and its environs continued to observe the spiritual and cultural practices that had previously defined their interactions with forest land resources. The furthering of European land sales, and the ultimate alienation of land resources from Māori, gave rise to discussions about reserving areas that held a level of cultural importance, including forest land. Moreover, the general reluctance among Māori to abandon forest land altogether often tied into concepts of whakapapa and mana whenua, wherein ancestral and familial connections to landforms, plants, and animals were given increased significance in the face of potential land loss. Dissent over Europeans' tendencies to offer inadequate compensation for acquired land also played a role in Māori interactions with the forest during this time; this also included the development of roads and railways across the

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[553] Whaanga and Wehi, "Rāhui," 4-5. ('*This land, which I have shown you, in fact is land that belongs to our children.*')

[554] *Waka Maori*, 22 September 1874, 239.

whenua, as well as the importation of exotic and invasive flora and fauna, and their collective effects on the forest in general. The decades following 1850 also marked a decline in the traditional food-gathering Māori had practiced in the region, although mahinga kai, subsistence farming, and the use of rāhui to govern land resource usage certainly continued throughout this time. Overall, Māori engaged significantly in efforts to protect traditional methods of forest living, ensuring the continuation of the "conservation ethic" observed in earlier periods.

Conclusion

This thesis has shown the extent, character, and variance between Māori and European uses of, and attitudes toward, forest land resources in Aotearoa between 1769 and the Forest Land Act of August 1874. Colonial incursions into New Zealand forests can generally be characterised by their chiefly economic focus, their rapid growth, and the perception of forests as an obstacle to European "development," in Wairarapa and the remainder of the colony. The establishment and advance of pastoralism, especially, encouraged European involvement in the clearance and replacement of forest at unprecedented levels by the time of the Forest Land Act. While some European efforts to encourage conservation certainly existed, these were generally unpopular, and did not result in meaningful outcomes for the preservation of native forests and their resources. The findings of this study also support the idea of a prevailing "conservation ethic" among Māori throughout the period. While early developments within the scope of forest resource management by Māori were defined by protracted periods of burning and clearance, the preservation and administration of forests was at the forefront of iwi land management by the time of Cook's arrival. Resistance against the overuse and exploitation of land by European colonists can be traced back even before the signing of Te Tiriti o Waitangi, and subsequent developments did not lessen the political, economic, and social scope of native bush preservation. By the end of the period, Wairarapa Māori were making efforts to continue traditional subsistence agriculture, along with dedicated measures towards ameliorating the development of roads, towns, and large-scale pastoralism that imposed upon forest land resources. These patterns were charcterised by the constant advances of colonialism and capitalism throughout Aotearoa, as well as European demand for ever-growing tracts of land and their resources. They also, however, encountered Māori resistance to deforestation and its consequences, in social, political, and material forms.

Prior to 1840, timber and flax harvesting by Europeans constituted a sporadic activity that was mainly defined by its limited use in trade and by economic speculators. Christian missionary settlements, trading posts such as Deptford, and regular visits by cargo ships solidified timber and flax as integral parts of the New Zealand colonial economy, and the

exploitation of forest resources in this manner became crucial to the continued operation of European settlement and trade. While wide-scale exploitation of New Zealand forest land resources was prevented by the perceived low rate of return that merchants would gain from timber and flax trading, this would change following rapid economic growth in Australia, and colonists' increasing involvement in the international economy. Dedicated forest clearance by Europeans began in the 1830s for the purposes of agricultural development, a radical departure from the timber-gathering expeditions and trading posts of previous years, representing the beginning of a trend that would define Europeans' interactions with forest resources in decades to come. With the added introduction of wheat, cereals, and grain crops, land clearance expanded dramatically as colonists, missionaries, and traders aimed to capitalise on the availability of "waste lands". The earliest stages of a cultural fixation on removing the forest, almost invariably describing it as "impenetrable" or an obstacle to European settlements' growth, also began to show themselves at this point; while a few literary pieces written by Europeans emphasised the perceived beauty and importance of forest resources, most writings placed a negative meaning onto the forests and advocated for their exploitation and removal. Moreover, regard for Māori traditional ways of life was sparse among these new colonists, and new Crown colonies came to rely on development based on overturning traditional cultivations and employing tangata whenua to clear bush. While the Wellington Province would not yet bear the full force of European colonisation, the exploration of Wairarapa in 1839 portended major upheavals in the decades to come.

In terms of European colonisation affecting Wairarapa's forest resources, changes began to occur in earnest during the early 1840s, when the squatter-leaseholder economy began to pervade the district. Settlers such as Weld, Clifford, and Vavasour, in establishing themselves in the valleys, became inextricably tied with Māori methods of cultivation and subsistence. The scarcity of resources familiar to these European settlers forced them to engage more extensively with the ways of life that had been practiced by their landholders, though this was not an undertaking with a view to long-term practical usage. Charts constructed by leaseholders, surveyors, and geographers involving the Wairarapa valleys, either as a whole or in part, universally identify the suitability of the

land for pastoral expansion, replacement by European plants and crops, and the clearance of forest for transport and other economic purposes; moreover, they offer a unique insight into the cultural environment in which they were created, something hitherto largely unexplored within New Zealand environmental histories. Although many forest resources in Wairarapa remained untouched or unused by squatters, this thesis has shown that this was motivated by economic necessity rather than a genuine interest in preserving native forests. The doctrine of "systematic colonisation" by Wakefield and his allies also played a major role in separating the apparently useful land from that which could not be cultivated, establishing extensive colonial outposts furnished with European goods and services through economic manipulation and the use of settler labour to clear forest and create new cultivations. The decade following the signing of the Treaty of Waitangi, then, did not remarkably change European outlooks on forest land resource usage; while new policies of settlement and colonisation, as well as ways to subvert these laws, came into effect relatively quickly, the exploitation of forest resources for economic and political gain continued at a steady pace throughout the decade.

Following this, European colonisation, especially in the wider Wellington Province, began to affect forest land resource usage in increasingly major increments. Over the course of two decades, Wairarapa witnessed a substantial European endeavour in extensive deforestation and the establishment of a thriving timber industry, a transformation that left an indelible mark on the district. The demise of the squatter economy and the purchase of wide tracts of land by McLean led to the establishment of larger settlements in the region, headlined by the Small Farms Association settlements and, later, the Scandinavian settlements in the Seventy Mile Bush. These settlements represented the first dedicated timber-felling and sawmilling settlements in the province and transformed the methods by which European settlers cleared land from the theoretical into the practical through their mass exploitation of timber resources. Moreover, Europeans continued to use strategies inherited from Wakefield and his successors to implement large-scale pastoralism. Cultural factors played a pivotal role in shaping this resource use, with an extensive literature advocating for deforestation and

explaining how settlers could "tame" the forest, contributing to the prevailing colonial perception of cultivated land as inherently valuable. Nonetheless, pockets of resistance within the European community opposed the wholesale exploitation of forest resources. While these were mainly rooted in financial considerations, there was at least some awareness of the consequences which could occur because of the depletion of forest land resources in the colony. Afforestation was mainly ignored, and government actions to curb mass deforestation often neglected to make provisions for the preservation of native flora species. By 1874, such Crown interventions had culminated in the Forest Land Act, signifying an official stance against the "destruction of forests" spurred by previous European land development practices, though, again, this mainly stemmed from a purely economic outlook on the land resource situation. Public opinions on forests, likewise, generally viewed them as obstacles, economic resources, or simply areas of land that could be bought or sold. By the end of the period, widespread European settlement in the district, accompanied by the advent of the timber industry and public works initiatives within the area, had culminated in the mass clearance of timber stocks and forest land resources throughout the district for the economic gain of settlers; while this was mitigated in part by efforts to conserve forest resource stocks, it is clear that Wairarapa's colonists, in general, viewed forest land resources as a means to a financial end. While previous investigations have emphasised any European involvement in forest preservation, this paper generally concludes that such efforts were rare and scattered in nature; European involvement in forests remained financially-motivated except on very rare occasions.

Among Māori, however, forest land resource usage took on a different perspective, as internal upheavals alongside the often-turbulent introduction of colonialism defined new interactions with horticulture, agriculture, and traditional land use. Immediately following 1769, Māori interactions with Aotearoa's forest environments began to shift dramatically. The introduction of new perennial crops such as taewa caused land resource usage in general to skew towards their growth, and the tradition of the "seasonal round" of subsistence agriculture began to be disrupted. Moreover, the European timber trade and its consequences, alongside whaling and flax-gathering

voyages, facilitated new forms of trade and political interaction among Māori, often centred around timber and forest resources. This shift emphasized a more colony-oriented approach, prioritising external trade engagements. Consequently, a surge in widespread migrations occurred across the rohe, driven by heightened territorial disputes and the imperative to secure additional land for facilitating trade endeavours. The timber trade, in conjunction with the exchange of forest resources, emerged as a central aspect of Māori engagements within their forest landscapes. This trend indicated a departure from traditional horticultural and agricultural methodologies, driven by the aim of fostering increased economic interactions within a colonial milieu, even in regions where contact with colonists had been limited.

Following the signing of Te Tiriti o Waitangi in 1840, Māori engagements with forest land resources began to be dominated by the prospect of land sales and the trend of resource alienation. In the Wairarapa districts, social and political upheaval prevailed among responses to forest land transfer agreements. Considerable compensation was often demanded from Europeans by Māori, to more effectively offset the cultural cost of severing whenua connections to tūpuna and whakapapa. Among those that debated selling land altogether, there were other currents of thought. Leasing to Europeans, for example, often led to temporary agreements that both parties considered, to an extent, mutually beneficial, striking the balance between the outright sale of valuable and historic forest land and the lack of any opportunity to interact with the highly lucrative colonial economy. This lease-hold system often defined Wairarapa Māori interactions with the European settler economy. The population in Wairarapa crystallised into increasingly individualistic groups defined by familial and hapū connections, in part due to the introduction of European systems of both economy and social structure to iwi in the region. The previously undocumented transfer of land between kin-groups and family members became increasingly important, as knowledge of exactly who owned land and how it could be used became crucial in this new political climate. Land court documentation and oral histories are paramount to a deeper understanding of Māori cultural responses to forest loss at this time, providing direct insight into public opinions and actions. This thesis has shown that the interactions of Māori with localised regions

of forest and its resources tended towards a strong conservationist ethos, which underran land transfer negotiations and agreements, alongside political efforts to strengthen and document whakapapa connections and lineages to connect them to the land. By 1850, Māori in the district were constantly engaging with both indigenous systems of forest land tenure and colonial European methods of economic aggrandisement.

These ideas of historic connections to land continued over the next two decades. By 1874, Māori political engagement with forest land resource usage and transfer had solidified into a growing awareness of the benefits and consequences of forest land alienation, culminating in efforts either to neutralise the impact of major land sales or to oppose them altogether. The continued advance of European colonial land acquisition forced discussions and dissension among Ngāti Kahungunu and Rangitāne hapū throughout the northern and southern districts of the Wairarapa, centred on the reservation and sanctification of culturally important resources, landforms, and historic sites. Pou whenua, tapu, and rahui continued to be used as signifiers of connection and use of forest resources throughout the area, and increasingly Māori became vocal about whakapapa, mana whenua, and related concepts as they applied to forest resources. Māori continued to, as they did in other areas of society, advocate for themselves, their whenua, and their views on environmental destruction and conservation by engaging with Crown institutions, such as by petitioning and testifying in Land Courts and in writing letters to key figures involved in European development throughout the region. Land transfer agreements continued to face opposition over inadequate compensation, as they had in previous decades, this time as a dedicated form of documented resistance against colonial expansion and forest destruction, as it had occurred in Ahiaruhe and at Te Taperenui-a-Whātonga. This research has also shed light onto the actions and reactions surrounding the smaller, scattered communities of Wairarapa, such as the Puketoi block, about which very little has been written previously. Colonists' attempts to construct larger-scale settlements, along with roads and railways cutting through the forest, also played a major role in Māori responses to forest land use at this time, as did the wholesale importation of exotic fauna and flora. Internal opposition, neutrality, and optimism concerning new forest developments by Europeans continued to define politics among

Māori of the region, causing a split between those who wished to acquiesce to forest land sales and those who opposed them altogether; this is a novel viewpoint in opposition to previous papers, which have commonly insisted that Māori viewpoints were more or less monolithic. While mahinga kai and other traditional forest-based practices declined, they remained a crucial and central part to Māori forest living throughout the decades to 1874, and the preservation of forests, with their plants, birds, and freshwater resources, remained paramount in the culture of Wairarapa Māori during this period.

In conclusion, this thesis has clearly shown the underlying motivations, economic currents, and social responses regarding forest land resource use throughout the mid-nineteenth century by both colonists and tangata whenua. Māori remained, throughout this period, motivated by whakapapa, the continuation of traditional aspects of forest living, and connections to whenua in addition to the recently introduced European timber and pastoral economy. Whereas previous studies have largely characterised tangata whenua as being passively involved in native forest conservation, this thesis has displayed that Wairarapa Māori opposition to European expansion into traditionally held forest environments was both ever-present and complex in nature, encompassing cultural, social, and economic aspects of traditional and colonial living. Far from being entirely eradicated following Te Tiriti o Waitangi, mahinga kai and the seasonal round continued to occur to a relatively full extent throughout, and beyond, the period in question, calling into doubt the so-called passivity of Māori landholders. European motivations, meanwhile, have been questioned and explored in this study, leading to the conclusion of a largely economic motivation for most Europeans' attitudes towards forest land exploitation. Among Europeans, forest remained an entity defined by its financial worth to a landowner, although opposition to these ideas existed in minor forms throughout the period. Social movements, alongside prevailing economic consciousnesses, defined the mid-nineteenth century as a turbulent period for forest land resource use and its history. To reduce Māori and European involvement in pre-1874 forest history to singular characteristics is to conceal the multiple currents and varying ideologies that could define interactions with the forest throughout the period. Non-reductive studies of Māori internal social movements, alongside careful examination of European cultural primary

literature, are key to redefining New Zealand's economic past in terms of its people and its environments.

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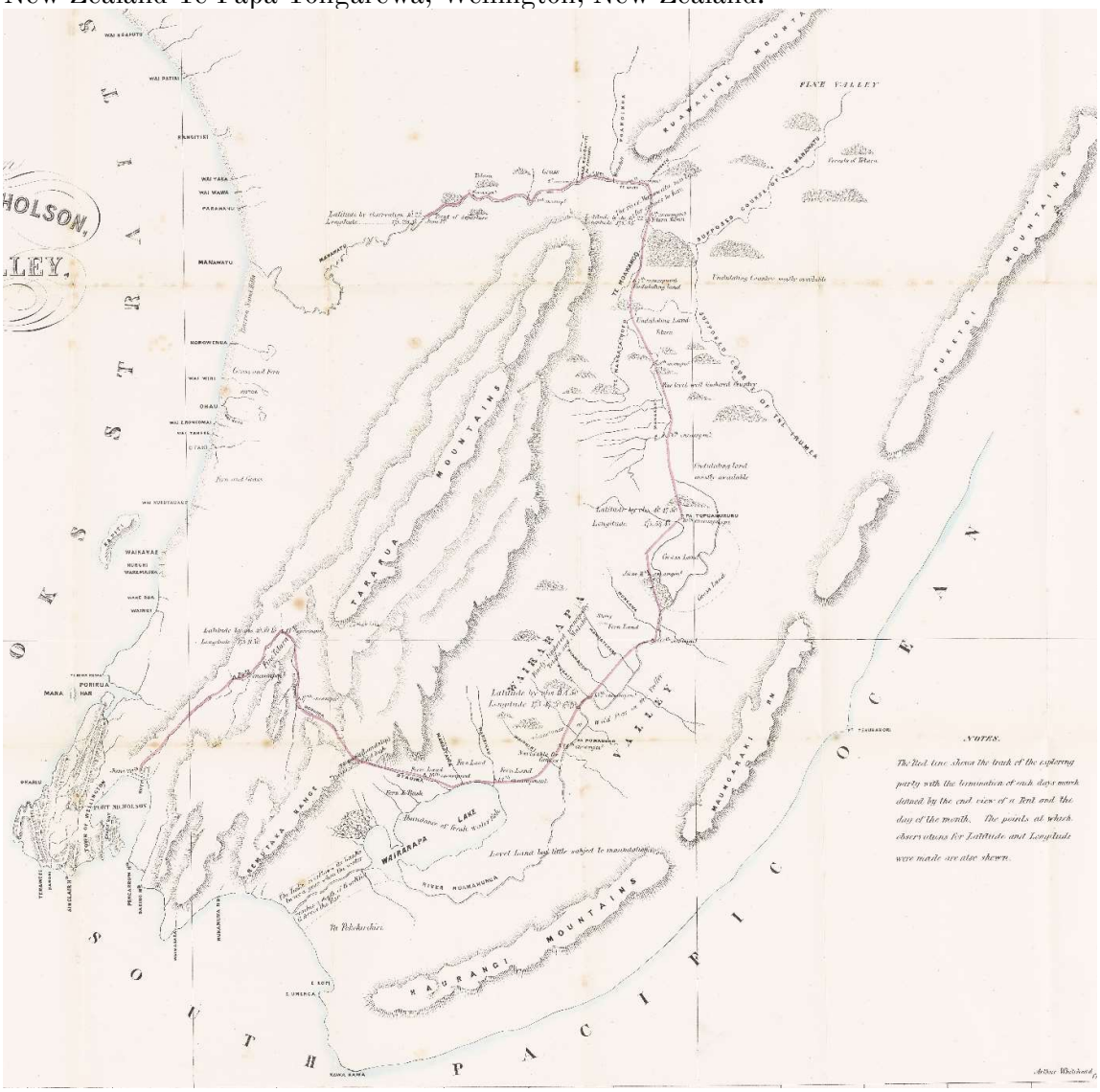
Appendices

Appendix I: Maps

C. H. Kettle (1842), *Chart of the Country between Manawatu and Port Nicholson, Comprising the Wairarapa Valley, New Zealand* [detail]. RB000217/001, Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand.



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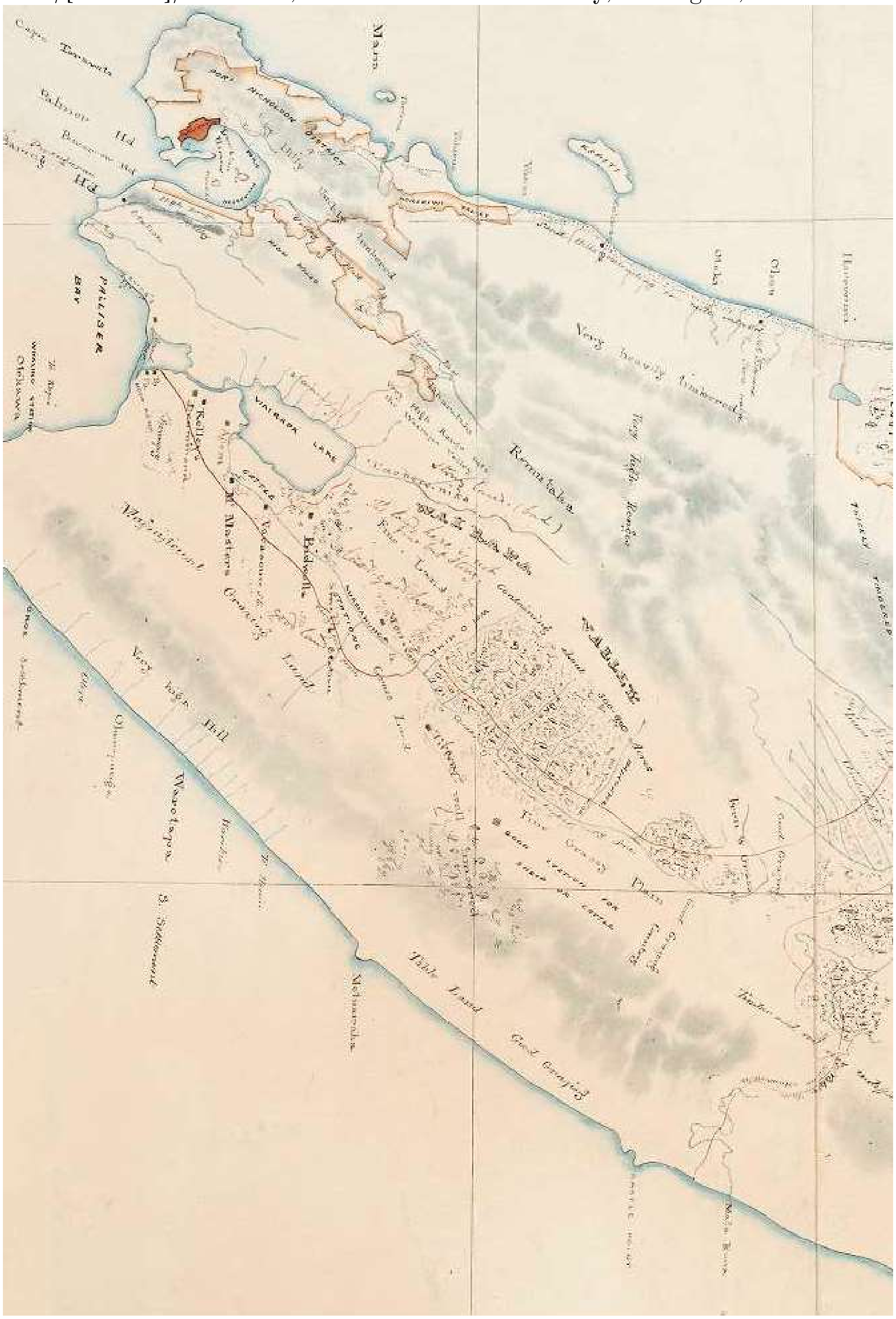

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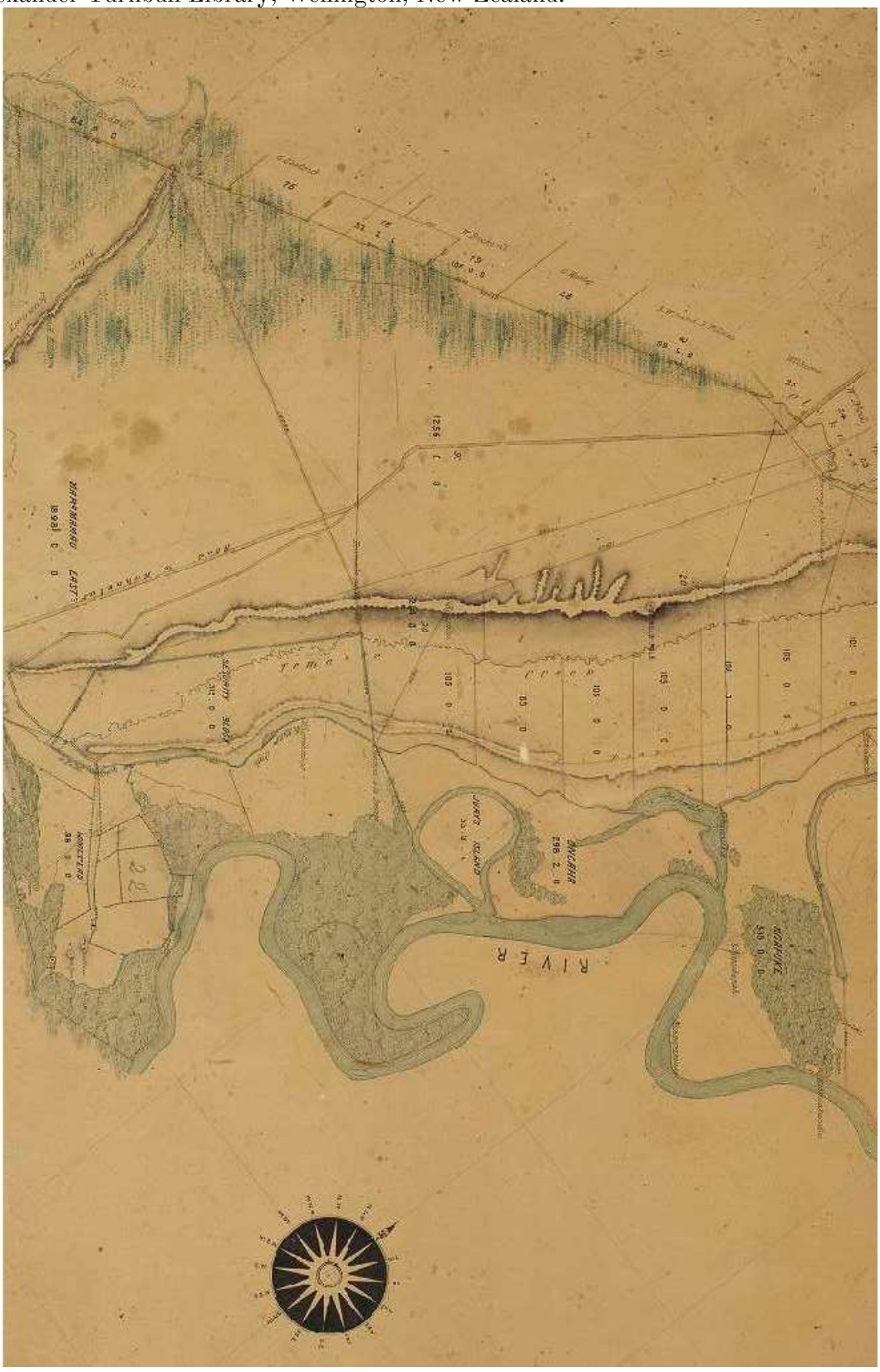

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