

Maori Councils Act 1900: suspending floors

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ABSTRACT: A recent review of the evolution of sub-floor moisture management (Isaacs "Evolution of Sub-Floor Moisture Management Requirements" pp 366-394) found the first New Zealand legislative requirement for raised floors was in 1902 in by-laws made under the Maori Councils Act 1900. No similar requirements have been found in contemporaneous European building by-laws until those recommended by the Department of Public Health, Hospitals and Charitable Aid in 1912, which dealt with suspended floor durability.

Although the use of well-made, well-drained earth floors used in Māori housing in pre-European times was in some sectors of Māori society looked back on with nostalgia, the use of suspended timber floors provided a drier, if airier, and healthier option. The Young Maori Party, with the support of the government, created a model by-law with two approaches to raise sitting and/or sleeping above ground. These required either the construction of suspended floor, or the use of a couch or bedstead at least 1 ft (0.3m) above the ground. As well as the ability to fix a time limit for compliance, it also provided the ability to levy fines if the household refused or neglected to comply with the notice. There was little variation in the implementation of the model by-law in the 24 districts established under the Act over nine years (1901 to 1910), except for the raised floor requirement (and associated penalty for non-compliance) which was not implemented in seven (30%) districts.

It is concluded that unlike the durability concern of European suspended floor building by-laws, the Māori District by-laws were solely concerned with improvement of the health of the occupants.

Introduction

A recent review of the development of sub-floor moisture requirements found the first mention of any New Zealand legislative requirement for a raised floor was in 1902, even though building controls had been in place since the 1840s.¹ This paper explores the background to this requirement and compares it to other New Zealand local government by-laws around the same time.²

In New Zealand, the traditional, pre-

European, Māori housing had solid, rammed-earth floors made hard and compact by repeated use. This was also a feature of early European housing but was considered unhygienic. Under normal conditions earth floors lose moisture to the air so are dusty but ground water, accidental spills or damaged water carrying fixtures can make them damp. Without regular attention they can easily become shabby, but regardless they were considered impossible to keep clean. Traditional Māori sleeping house floors were covered with dried fern (rarauhe), or raupō, or both, and on these were placed whāriki (mats) plaited from native flax, paopao or

kiekie.³ In Britain rushes and herbs were similarly used on earth floors to reduce dust and smells,⁴ although needing to be regularly replaced.⁵ It is interesting to note that although a 150 mm raupō wall exceeds modern New Zealand Building Code levels of thermal insulation, with its solid earth floor the dwelling fails requirements for durability,

³ Landcare Research | Manaaki Whenua "Ngā Tipu Whakaoranga: Maori Plant Use" np.; Papakura *The Old-Time Maori* p 284; Phillipps *Māori Houses and Food Stores* p 23.

⁴ Douglas "The Development of Ground Floor Constructions" p 110.

⁵ Wright *Warm and Snug* p 67.

¹ Isaacs "Building Legislation 1840 - 1870" pp 179-184.

² Isaacs "Evolution of Sub-Floor Moisture Management Requirements" pp 366-194.

moisture or fire performance.⁶

It was not until the mid-1800s that an effective low-dust, moisture-control ground covering was developed – concrete. Portland cement concrete was used in British house foundations from the mid-1850s,⁷ while the earliest New Zealand concrete slab-on-ground floor is reportedly an 1862 cow shed at Tarureka, near Featherston.⁸

A more satisfactory option was the use of suspended timber floors. By lifting the floor above the damp ground, a clean, dry, although sometimes airy, floor could be provided.⁹ Ingenious solutions were found to lift the floor above the ground in order to provide a ventilated space. Fyffe House, Kaikōura, dates from the mid-1840s and stands on piles made from discarded whalebone vertebrae from the whaling industry.¹⁰ Locally sourced, shaped river stone piles still support the house "Ranzau," at

⁶ Isaacs "Making the New Zealand House 1792-1982" p 61.

⁷ Douglas "The Development of Ground Floor Constructions" p 111.

⁸ Thornton *Cast in Concrete* p 24.

⁹ Drummond & Drummond *At Home in New Zealand* p 89.

¹⁰ Harris *Tohoro* p 14.

Hope, near Nelson, built around 1844. Lady Barker reported on the materials for their high country house being transported from Christchurch in March 1866:

two dray-loads of small rough-hewn stone piles, which are first let into the ground six or eight feet apart: the foundation joists rest on these, so as just to keep the flooring from touching the earth. I did not like this plan (which is the usual one) at all, as it seemed to me so insecure for the house to rest only on these stones.¹¹

By the 1880s, suspended timber floors were expected in European settler houses, for example, appearing in the plans for all three model houses in the first edition of *Brett's Colonists' Guide*.¹²

However, it would appear that much Māori housing continued with solid-earth flooring. In the absence of data on Māori housing (it was not until the 1951 census that Māori housing data was collected¹³) the scale of the problem was unquantified, but the issues of health were not. In his 1910 Doctor of Medicine thesis, Te Rangi Hiroa (Sir Peter Buck) noted that the "original unfloored dwelling house when situated upon a high,

¹¹ Barker *Station Life in New Zealand* p 49, Letter VII.

¹² Leys *Brett's Colonists' Guide* pp 723-734.

¹³ Isaacs ""Free-Standing, Wooden, Upright"" p 31.

dry, well-drained site, was immeasurably superior to the same type of dwelling" on a site where insufficient attention has been paid to subsoil drainage.¹⁴

Maori Councils Act 1900

In the early 1900s the Young Maori Party was interested in improving Māori health and social conditions.¹⁵ Along with the government, represented by Sir James Carroll, the Minister of Māori Affairs, it promoted local self-government. This was given form by the Maori Councils Act 1900 (64 Victoriae 1900 No 48), passed on 18 October 1900. The list of 18 topics over which local Māori District Councils were to have power (extended to 21 in the Maori Councils Amendment Act 1903) included the registration of dogs, branding of cattle, control of gambling, prevention of drunkenness and sly-grog selling, as well as issues of sanitation and health.

The health aspects of traditional Māori dwellings or sleeping buildings had gathered attention. The traditional whare puni with a sunken earthen floor was still in use in the early 1900s, when the Department of Health

¹⁴ Hiroa "Medicine Amongst the Maoris, in Ancient and Modern Times" p 89.

¹⁵ Sutherland *The Maori Situation* p 45.

began its campaign against their continued use.¹⁶ The Maori Councils Act 1900 (subsection 16(1)), with respect to health, permitted the making (and revoking) of bylaws dealing with:

For the providing for the health and personal convenience of the inhabitants of any Maori village, pa, or assemblage of houses.

By-laws could also deal with the enforced cleansing of houses and other buildings in a dirty and unwholesome state, although this requirement is not considered in this paper.

The Parliamentary debates leading to the passing of the Bill reveal discussions of the general coverage of the legislation, issues of liquor and gambling but no mention of buildings.¹⁷ Buildings were of concern as evidenced by Āpirana Ngata, then a Member of Parliament and closely associated with James Carroll, Minister of Native Affairs, in

¹⁶ Hiroa *The Coming of the Maori* p 136.

¹⁷ Legislative Council and House of Representatives *New Zealand Parliamentary Debates ... September 14 to October 9, 1900* v 114, p 373 (1st reading 28 September 1900), v 114, p 441. (2nd reading 2 October 1900); Legislative Council and House of Representatives *New Zealand Parliamentary Debates ... October 9 to October 20, 1900* v 115, pp 201-204 (Committee & 3rd reading House 12 October 1900), v 115, pp 266-271 (Council 15 October 1900).

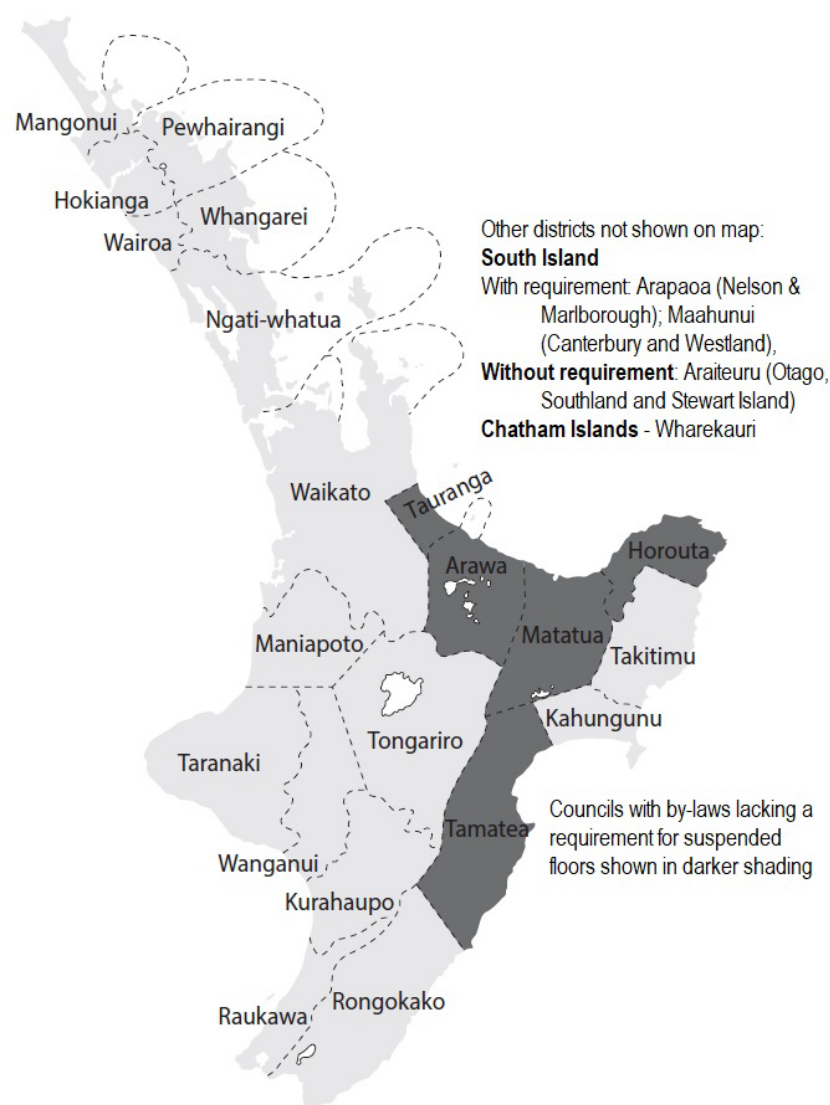


Figure 1: Māori Council Districts (based on Lange *May the People Live* p. 190).

his address of 30 September 1909 to St Mary's Society, Timaru. His notes recorded "the Councils had been established mainly to improve physical living conditions and curb alcohol consumption," although this issue is not included in the *Timaru Herald* report.¹⁸

The original Māori 19 Council districts were gazetted on 7 January 1901: Mangonui; Hokianga; Tokerau (renamed Pēwhairangi 1904); Whangarei; Wairoa; Ngāti-Whātua; Te Arawa; Matātua; Horouta; Tākitimu; Kahungunu; Maniapoto; Tongariro; Taranaki; Whanganui; Kurahaupō; Tamatea; Rongokako; and Raukawa;¹⁹ with two more added on 20 February 1902: Wharekauri (Chatham Island) and Tauranga,²⁰ and three more on 7 August 1902: Arapawa; Mahunui; and Āraiteuru.²¹ By early 1903, all 24 had adopted the model by-laws which were then gazetted. **Figure 1** maps the North Island districts.²²

¹⁸ Lange *A Limited Measure of Local Self-Government* p 36; "The Maori" p 7.

¹⁹ Carroll "Defining Districts under "The Maori Councils Act, 1900"" (1901) 1:12-14.

²⁰ Carroll "Defining Districts under "The Maori Councils Act, 1900"" (1902) 15:413.

²¹ Carroll "Defining Districts under "The Maori Councils Act, 1900"" (1902) 62:1643.

²² Lange *May the People Live* p 190.

NZ Gazette 7 Jan 1901 Issue 1 pp 13-14, Signed J. Carroll, Minister of Native Affairs 26 Dec 1900						
1. Mangonui 18 Feb 1902	2. Hokianga 10 Apr 1902	3. Tokerau 17 Apr 1902	4. Whangarei 17 Apr 1902	5. Wairoa 3 Apr 1902	6. Ngati-Whatua 6 Feb 1902	7. Te Arawa 19 Dec 1901
8. Matatua 27 Feb 1902	9. Horouta 5 Dec 1901	10. Takitimu 13 Feb 1902	11. Kahungunu 18 Feb 1902	12. Maniapoto 6 Mar 1902	13. Tongariro 22 May 1902	14. Taranaki 13 Feb 1902
15. Whanganui 6 Feb 1902	16. Kurahaupo 29 May 1902	17. Tamatea 7 Nov 1901	18. Rongokako 27 Feb 1902	19. Raukawa 15 May 1902		
NZ Gazette 20 Feb 1902 Issue 62 p 413				NZ Gazette 7 Aug 1902 Issue 62 p 1163		
20. Wharekauri 12 Feb 1903	21. Tauranga 18 Sep 1902			22. Arapawa 25 Sep 1902	23. Mahunui 2 Oct 1902	24. Araiteuru 9 Oct 1902

Table 1: Māori Districts: when name & rules gazetted (spelling as gazetted)

The originating source of these by-laws had been the Young Maori Party (the general name for the Te Aute College Student's Association²³) which had been invited to draft model bylaws to guide the Māori Councils. It did so at its annual conference in December 1900, and these in turn were provided by the government to the newly formed Councils.²⁴ Although aspects of the proposal had clear political implications (e.g. the ability to charge for dog registration),²⁵ the health issues were less contentious.

District Maori Council By-laws

The by-laws were gazetted in both English and te reo Māori. **Table 1** gives the dates the districts were first gazetted, and then the

dates of the first set of by-laws. On 8 September 1904, Tokerau Maori District was renamed Pewhairangi Maori District.

The basic model by-laws used by all of the councils commence with "Health and Personal Convenience" issues. These deal firstly with human corpses (subsections 1-4): requiring them to be buried within three days of death in the warmer months (16 September to 14 March of the following year) or within four days during the rest of the year; setting out the fine for a breach; that the body lie-in-state outside the house and be buried in a recognised burial ground.

²³ Hill *State Authority, Indigenous Autonomy* p 44.

²⁴ Lange *A Limited Measure of Local Self-Government* p 27.

²⁵ Hill *State Authority, Indigenous Autonomy* pp 53-54.

Housing issues become of concern for subsections 5-7, although not all councils used these subsections. The text used here is extracted from the 1910 Raukawa District Maori Council by-laws²⁶:

5. The Council may, by notice in writing in Form A in the Schedule hereto, require the owner or occupier of any house within a kainga (other than cooking-houses, kautas, and outbuildings) which shall be erected after the coming into operation of these by-laws to construct a raised wooden floor for the same (within a time to be specified in such notice), to be approved by the Council or any person or body it may authorize in that behalf.
6. Any person who, after service upon him of such notice as aforesaid, refuses or neglects, within the time specified in such notice, or such further time as the Council may allow, to comply with the same, shall be liable to a fine not exceeding one pound.
7. The Council in lieu of notice referred to in By-law No. 5, by notice in writing in Form B in the Schedule hereto, require the owner or occupier of any such building as is referred to in By-law No. 5 to construct or provide a couch or raised bedstead in such house at least 1 ft. above the ground; and any person who, after service of such notice, shall refuse or neglect within the time specified in such notice to comply with the same shall be liable to a fine not exceeding one pound.

Table 2 provides the wording of Form A –

²⁶ Carroll "By-laws of the Raukawa District Maori Council" (1910) 92:3730-3732.

<p>Form A. (By-law No. 5.) To [Name], [Address]. GREETING. You are requested to construct a raised wooden floor for your house within ___ days after the service of this notice upon you, to the satisfaction of the Council [or Village Committee] or its authorized agent. And you are warned that if after service of this notice upon you you refuse or neglect within the time above specified to comply with the said notice you will be liable to a fine not exceeding £1 Dated the __ day of ____, 19__ Chairman [or Clerk] of Council [Seal.] [or Village Committee].</p>	<p>Form B. (By-law No. 7.) To [Name] [Address]. GREETING. You are requested to construct or provide a couch or raised bedstead at least 1 ft. above the ground for your house within __ days after service of this notice upon you. And you are warned that if you refuse or neglect within the time above specified to comply with this notice you will be liable to a fine not exceeding £1. Dated the __ day of ____, 19__ Chairman [or Clerk] of Council [Seal.] [or Village Committee].</p>
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Table 2: Relevant forms set out in the Schedule to the By-laws of the Raukawa District Maori Council.

request to construct a raised floor, and Form B – requirement to provide a raised couch or bed, also taken from the 1910 Raukawa District Maori Council by-laws.²⁷ Identical forms were included in the schedule of the other Councils' by-laws.

The first three councils to adopt the by-laws in late 1901 (Tamatea, Horouta and Te Arawa) did not include a clause requiring a floor to be installed, but from the start of 1902 of the remaining 21 only three (Matātua, Arapawa and Āraiteuru) had no floor or raised bed/couch requirements (Clauses 5-7 above),

²⁷ Carroll "By-laws of the Raukawa District Maori Council" (1910) 92:3731-3732.

while the Tauranga by-laws only included the power to require a raised couch or bed (Clause 7 above).

Āpirana Ngata, then Organising Inspector of Māori Councils from 1902 to 1904, had advised that the Matatua District (which included Te Urewera) by-laws should be less stringent,²⁸ which may have led to the exclusion of the flooring or couch requirements in that district. Possibly other Māori districts which did not include such requirements did not consider these to be sufficiently important to justify the expenditure of limited funds. **Figure 1**

²⁸ Lange *May the People Live* pp 198, 220.

includes annotation of the North Island Māori Districts map to show those for which there was no requirement for raised floor or a raised bed/couch.

Although the 1910 Clause 5 (see above) expressly requires the owner "to construct a raised wooden floor," this was the first use of the descriptor "raised wooden" in the clause (i.e. in the earlier District by-laws other materials could be used), although "Form A" from the outset required "a raised wooden floor." Of the districts with a by-law requiring a raised floor or bed/couch, nearly all had a fine of £1²⁹ for refusing to implement the request given in Form A or B (Table 2). The exceptions were Whanganui and Wharekauri with a fine of 10s (\$95 in 2019³⁰) and Hokianga with a fine of £1 for not installing a raised floor and 10s for not providing a raised bed/couch.

Whether these fines for not having a raised floor or couch were enforced is not known, although the councils did raise income from

²⁹ The Reserve Bank CPI calculator gives the 2019 equivalent as \$190. Reserve Bank of New Zealand "Inflation calculator" np.

³⁰ Reserve Bank of New Zealand "Inflation calculator" np.

finances. Of the 29 clauses in the 1910 Raukawa District Maori Council by-laws, 17 clauses included fines, resulting in income. For example, in the second quarter of 1902 the Whanganui Council (excluding the initial government grant) had a total income of £84 14s 10d including £7 1s 6d from fines, and in the following quarter of a total of £17 0s 4d the fines were £13 8s 8d, but the accounts provide no details.³¹

The by-laws raised sleepers off the floor and additionally achieved improved ventilation of the living and sleeping spaces. It is likely that the then current European building practices did not close off the sub-floor area with a perimeter cladding, so free movement of air to maintain acceptable moisture levels was expected, removing the need to define specific ventilator sizes. The shift from "miserable whares" to "neat wooden cottages" provided a great improvement in housing quality and sanitation, even if some "whare pākehā" were draughtier due to a lack of inside lining.³²

The lack of ventilation requirements under the raised timber floor in by-law 5 (e.g. by the

³¹ Lange *A Limited Measure of Local Self-Government* p 43.

³² Lange *May the People Live* pp 151-152.

provision of a number of ventilators for the sub-floor) coupled with the option in by-law 6 to provide a "couch or raised bedstead in such house at least 1 ft. [0.3m] above the ground" suggests the intention was to stop the use of rammed earth floors, not necessarily to ensure the durability of the timber floor.³³ Te Rangi Hīroa noted that not everyone was happy with the change: "During the day, the board house impressed the law but at night, the old people stretched out snug on the earthen floor of the beloved whare puni at the back."³⁴

Pākehā By-laws

Pākehā settlers in many smaller locations had no such requirements for a raised timber floor. For example, the by-laws of the Gisborne Borough Council for 1907,³⁵ and the Marton Borough for 1912,³⁶ required the site be free of "foecal [sic] or animal or vegetable matter" or "deleterious material" as well as being properly drained, but set no requirement for approval of the floor. Larger cities were adopting building by-laws based on overseas

³³ Isaacs "Evolution of Sub-Floor Moisture Management Requirements" p 385.

³⁴ Hīroa *The Coming of the Maori* p 136.

³⁵ Gisborne Borough Council *By-Laws* p 59, Clause 18.

³⁶ Marton Borough Council *The Marton Borough General By-Laws* pp 26-27, Clauses 8-11.

(notably British) practice for subfloor moisture management. In 1912, Wellington City Council in 1908,³⁷ Dunedin City Council³⁸ and Johnsonville Town Board³⁹ (now a suburb of Wellington) each had requirements for the surface of the ground to be covered with asphalt or concrete and for there to be a clear space between the top of the covering the underside of the floor joists, although no requirement for sub-floor ventilation for moisture management.

Not all cities, towns or boroughs had building by-laws in the early part of the twentieth century. As part of the development work for a national conference on the use of timber in houses,⁴⁰ in 1924 letters were sent to 124 county councils and 16 city engineers. Not all responded, but, in a situation unlikely to have changed since the start of the century, the Bay of Islands County Council reported it had "no regulations or by-laws governing the erection

of dwellings"⁴¹ while the Waimate County Council simply "had no building by-laws."⁴²

Although outside this first decade of the twentieth century, it is worth briefly exploring the next steps in the development of New Zealand building controls, particularly with respect to the Māori Districts. An early step towards standardisation of building by-laws, at least from the public health viewpoint, came in 1912 when the Department of Public Health, Hospitals and Charitable Aid's publication, *Suggestions for By-laws Suitable for Adoption in Counties, Town and Road Districts*, even considered sub-floor ventilation or moisture control.⁴³ Developed by the Auckland office, it was intended to be used by local authorities as a model for their own by-laws covering general provisions as well as issues of buildings, drainage, nuisances, animals, and privies.⁴⁴ Many of these

suggestions were adopted for the major revision of Māori district by-laws in 1922, the first of which was for the Mangonui Maori District.⁴⁵

Discussion & Conclusions

This paper has explored the application of the Maori Councils Act 1900 to the regulation of housing and the comparison to by-laws made under the Act with contemporaneous Pākehā settlement building by-laws. There was very little variation in the implementation building aspects of the by-laws between the various districts, except the lack of a raised floor requirement in seven of the 24 (30%) of the districts. Over the nine years from 1901 to 1910, the form of the by-laws was unaltered as they were adopted by each district.

Although the use of well-made, well-drained earth floors used in Māori housing in pre-European times was in some sectors of Māori society looked back on with nostalgia, the use of suspended timber floors provided a drier, if airier, and possibly healthier option. One interesting issue is that while the thermal performance of traditional, e.g. raupō,

31 March 1913" p 69.

⁴⁵ Coates "By-laws of the Mangonui District Maori Council" (1922) 1:76.

³⁷ City of Wellington *City of Wellington By-Laws* p 95, Clause 225.

³⁸ Dunedin City Council *Corporation of the City of Dunedin By-Laws* pp 74-75, Clauses 208-210.

³⁹ Johnsonville Town Board *By-Laws of the Johnsonville Town Board* p 33, Clause 118.

⁴⁰ New Zealand State Forest Service *Recommendations* p XIV.

⁴¹ Blundell. Letter to Director of Forestry from Bay of Islands County Council Engineer. 19 March 1924.

⁴² McLauchlan. Letter to Director of Forestry from Waimate County Clerk. 11 March 1924.

⁴³ Department of Public Health, Hospitals and Charitable Aid *Suggestions for By-Laws*.

⁴⁴ New Zealand Parliament "H-31 Public Health and Hospitals and Charitable Aid: Report Thereon by The Inspector-General of Hospitals and Charitable Institutions and Chief Health Officer for the Year Ending

housing would achieve compliance with the energy efficiency requirements of the modern NZBC, there is no empirical evidence of the ventilation performance of traditional Māori housing and hence the numbers of people who might be healthily housed – a potential future research topic.

The Maori Councils Act 1900 both established Māori districts and provided them with the legal power to make their own by-laws. First in this list was to provide for the health and personal convenience for the inhabitants of any Māori village or group of houses. The Young Maori Party, with the support of the government, created a model by-law dealing with two approaches to raise the level of those sitting and/or sleeping above the ground. This either used the construction of suspended timber floors or the use of a couch or bedstead at least 1 ft (0.3m) above the ground. As well as the ability to fix time limit for compliance, the by-laws also provided the ability to levy fines if the household refused or neglected to comply with the notice.

If the purpose of the by-laws had been to ensure the durability of the timber floor, then they would be expected to have a requirement for some open ventilation to ensure the sub-

floor airborne moisture was adequately reduced to an acceptable level. No requirement is present, suggesting the goal was to ensure occupants were raised off the (presumably) damp ground, which while improving their health and well-being also acted as a push towards European housing and European "civilisation."

In larger Pākehā settlements, contemporaneous by-laws were often developed from those used in Great Britain and included the use of ground cover (asphalt or concrete) with minimum air gaps between the top of the ground cover and the underside of the floor joists. These requirements were directed towards the durability of the wooden flooring. It was not until the 1920s that Māori District building by-laws considered the issue of sub-floor ventilation for durability, and then used a model code developed by the Ministry of Health.

It would be interesting to know to what extent the by-laws increased the use of raised flooring in Māori housing, and whether this was achieved in the majority of dwellings by the use of a raised couch or bed, the addition of a raised floor in traditional housing, or the complete replacement of traditional housing

by European-style housing. What is clear is that, even though the requirement for suspended timber flooring was the first New Zealand legislative requirement for a raised (and presumably ventilated) floor, it was not for sub-floor moisture management but for the purpose of improving the health of the occupants of Māori villages and dwellings.

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