

Auckland Conversations: Keep Kauri Standing

Auditorium Auckland Museum, 6 August 2013

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Tena kouto, tena kouto, tena kouto

Welcome

- Great turn-out
- Auckland Conversations usually on such things as planning and urban design
- First environmental conversation, provides encouragement to organise more
- Serious subject tonight – the future of the Auckland Northland and Waikato region's most iconic tree species, the kauri, and how we can collectively tackle kauri Phytophthora Taxon Agathis which has afflicted this beautiful tree.
- I hope we come away tonight more informed and inspired to action

Firstly, I'd like to welcome guests

Te Warena Taua, Trustee of Te Kawerau a Maki Iwi Tribal Authority Board, who will talk about the cultural significance of kauri and the implications of kauri PTA.

Dr Bruce Burns – Kauri Forest Ecologist, University of Auckland, will speak about the special ecology of the kauri and how it determines the nature of the forest where it is dominant.

Dr Nick Waipara - Biosecurity Principal Advisor, Infrastructure & Environmental Services manages the Auckland Council Kauri PTA programme and will describe how Council is managing the disease.

Professor Giles Hardy - Professor of Forest Pathology, Centre of Phytophthora, Science and Management, Murdoch University Australia
Professor Hardy is currently Director of the State Centre of Excellence on Climate Change, Woodland and Forest Health, and Director of the Centre for Phytophthora Science and Management.

Professor Hardy is an expert in forest pathology and natural ecosystems, in particular, how biotic and abiotic plant diseases impact on ecosystem function and health.

Professor Hardy will talk about what has been happening in Australia to tackle similar phytophthora challenges.

We have quite a tight programme. I propose that we hold questions to the end and you can then ask any of the speakers.

While Kauri phytophthora taxon agathis unique and specific to kauri, phytophthoras have been recorded throughout the globe, and through history, with devastating effects on the plants they infect and the people who depend on them. The Irish Potato Famine is an example, one of the many reasons for mass emigration from Ireland to countries such as Australia and New Zealand in the 19th century.

Sudden oak death is caused by another phytophthora. Cocoa black pod disease results in up to 30% of global yield loss annually.

Avocados in New Zealand, and worldwide, are often inoculated through the truck annually to prevent their decline and death from phytophthora.

You can see that New Zealand is not alone with its tragedy of phytophthora and the kauri.

In introducing our speakers, I want to place kauri PTA in the historical context of timber milling, and to briefly outline the funding and political situation we are facing in Auckland.

In the contextual scene setting I will draw on my research: for the last 13 years I have been researching kauri timber milling at Piha, on the West Coast of Auckland, my focus being primarily on the workforce, for a collective biography of kauri timber workers who went to WW1.

The harm caused by kauri PTA needs to be seen in the context of the kauri timber milling industry, and its impact of kauri forest.

While Maori utilised kauri for various purposes, especially in building waka, their use of the tree was extremely modest. Maori were limited by the tools they had in their use of this resource. It took a long time to fell a kauri and shape it into useable shape with adzes alone.

The early explorers and settlers were not so constrained. This giant, straight, largely flawless tree and the timber's elasticity and strength, made it a sought after timber species from the earliest days of European exploration of New Zealand. Young rickers growing near the shore were ideal for ships' spars.

Colonisation led to an almost insatiable demand for timber to build houses, farm buildings, wharves, rail lines and so on, as well as kauri gum for a number of products.

Kauri timber literally built Auckland, though we often don't value enough this unique heritage, especially our Victorian and Edwardian kauri suburbs.

One historian notes that "urban New Zealand sucked the bush dry" and describes kauri in the mid to late 19th century, as "colonial plastic", stripped of its mana.

The earliest timber milling operations were based on the primitive technologies of the axe and pit-sawing. One historian calculated that to build the number of houses built between 1858 and 1864, there needed to be 3527 man years of pit sawing over 6 years, with a workforce of 600 pit-sawyers to keep up with demand for domestic house building alone. It made the fortunes of some of the region's early entrepreneurs and businessmen.

Kauri was also exported in large amounts to Australia and the west coast of America in the form of timber, shingles and prefabricated houses, many of those which survived the San Fransisco earthquake and fires, now being protected nationally for their heritage values. In 1853 36% of New Zealand's total export income came from the kauri industry and while this was outstripped by the products of farming it remained a major export earner.

By the mid-1860s, the introduction of powered machinery enabled to industry to greatly increase its output of sawn timber.

While the actual task of bush felling remained based on a few simple tools and technologies, the milling operation became increasingly industrialised, as this photo from the Piha Mill about 1916.

The tools used in the Piha bush were traditional and relied on the physical strength of bullock teams, the ingenuity of driving dams, rolling roads and and tramways and the timber jack or jack of all trades, the staple tool of the kauri bushman.

The methods of the timber millers were brutal, and consisted of what we would call today "clear-felling". Descendants of kauri bushmen have told me that the bush contractor would ascend the highest hill, and if there was a kauri standing, the men would not get paid until the job was completed.

The forest suffered an enormous toll. When, in 1915, the owner of the Piha land, a Canadian entrepreneur and businessman called Dr Frederick Rayner, tried to sell the whole of Piha including the land he was milling, the Auckland City Councillors took a trip to Piha and were treated to the spectacle and deafening sound of a dam being tripped. They concluded that the bush was so damaged, it would never recover.

The industry was incredibly wasteful. The first scarf to fell a tree often started 6 to 10 feet above the ground.

The whole crown section was discarded. 30-40% of the logs were destroyed in drives to get them to the mill.

The crowns were left lying, and with offcuts and mountains of sawdust also resulted in destructive fires, some like the Puhipuhi forest fire, burning for years. After this, the salvageable burned trees were milled.

By 1900 it was estimated only 300,000 hectares of the original 1.2 million hectares of kauri forest remained. Even then, it was not finished.

Piha, which had survived this frenzy because they could not engineer a way in, and the surf prevented logs or timber being shipped out, was eventually reached by a dizzying hauler system and coastal tramway. The system of tramway, inclines and haulers allowed penetration northward along the coast. When Piha was cut out, the centre of the industry moved to Great Barrier Island and Coromandel Peninsula.

Writers about kauri timber milling have tended to romanticise the industry and be enchanted by the technology: pigmy men defeating giant trees.

Certainly kauri timber millers greatly admired the trees they cut down, because of the size of the trees and the trueness of kauri wood. They polished kauri gum, crafted wood objects and recorded the size of the trees they felled.

We must not forget either that timber milling provided a major source of employment for both Maori and Pakeha for 100 years. In 1906 17% of the total New Zealand workforce was employed in some aspect of the milling and construction industries. There were 414 kauri mills. As the industry came to end, World War 1 broke out and bushmen were the first to enlist. Many did not return as they invariably did not have rank and were in the front lines.

It was only in retrospect that some in the industry saw the role they had played in the destruction of the great kauri forest.

Chris Ingram, who was the first manager of the Piha Mill, and who then went on to manage the Victorian Hardwood Company, wrote in the 1940s

“When a boy I loved Piha with its beautiful valley of kauri giants and never dreamed that I would be at the head of the vandals who destroyed ruthlessly nature’s magnificence and which would have formed a great heritage not only for the people of Auckland but New Zealand’s population, for the kauri - the finest of the world’s trees - will soon be a thing of the past.”

From the 19th century some conservationists started talking about the need to save some areas of original kauri forest. At the prompting of these people, the Piha Domain in the Waitekere Ranges, along Piha Road was sold to the Auckland City Council by Thomas and Augusta Ussher in 1899, one of the first land purchased in what would become today a 17,000 hectare conservation park.

The Cascades Kauri area in the Waitakeres is another area purchased in the 1920s after a public campaign. It was one of the few remaining unmilled areas in the Ranges. Both the old Piha Domain and Cascades Kauri are infected with PTA.

Trounson Park and Waipoua Forest were protected, though both are today infected with kauri PTA, Trounson very badly. But it was not until the 1950s that a major campaign was aimed at saving the remaining stands of unmilled kauri.

Logging of live kauri did not end in New Zealand until 1985.

Today there are only 7455 hectares remaining of the original 1.3 million kauri forests.

My father started coming to Piha as a school boy in the 1920s and camped in the old mill houses. As a child growing up at Piha, I heard about the kauri and we could see the old dams on the streams.

In the intervening years it has been miraculous seeing the kauri reviving, reappearing in enormous numbers in the catchments where they had grown.

The distinctive conical heads appeared on ridges and skylines above the bush canopy and we had thought the kauri was on its way to revival, though it had 100s and 1000s of years to catch up.

In 2006 the first sick trees were reported on the Maungaroa Ridge Track above the Piha Mill site. Initially these were thought to be another variety of phytophthora, but after some years of testing and research, they were announced to be the formerly unknown disease PTA.

It seems a very cruel blow that this regenerating kauri forest faces this dreadful new threat, although with PTA, no tree of any age is immune. This giant is at Cascades Kauri.

You are going to hear from other speakers, the efforts this Council is making to control the disease through research, public education, phyto-sanitary measures, closures of healthy areas and so on. Giles will inform us on what is happening in Australia.

Over the past five years, Auckland has been working with the Northland regional council, iwi, DOC and MPI in a joint agency approach. Significant funding was provided by the Ministry of Primary Industries, particularly on research.

We have this year learned that Ministry of Primary Industries will make no funding bid for ongoing budgets to continue this kind of research. In May, I and others from Auckland Council and Northland Regional Council went to see the Minister, Nathan Guy, to express our concern at this and the importance of continuing funding.

It was clear at the meeting that Mr Guy has developed the view that as little can be done to halt the spread of PTA, further investment is futile, although he did invite the Council to put in a business case by September.

We stressed to Mr Guy that we did not think it was all over: the disease has not been found in the Hunuvas or Coromandel, and its importance to the tourism industry particularly in Northland. Craig Browne the chair of Northland RC reminded Mr Guy that the Northland Rugby team wears kauri on its shirts. Kauri is not just an economic asset, but part of the cultural identity of our regions and beloved of our citizens.

We would all be the very much poorer without it.