Living with kauri dieback

A visual summary of findings from a qualitative research study with bush users in Titirangi, exploring culture, values, attitudes and behaviour, plus their experience of kauri dieback and the local response.

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MASSEY UNIVERSITY SCHOOL OF PSYCHOLOGY

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TITIRANGI COMMUNITY

What holds our community together?

VALUES & BELIEFS

Community values

Participants felt a strong sense of connection to their community through their neighbourhood networks; sharing knowledge, support and camaraderie.

Participants suggested enjoying the social hallmarks of a village, where people are welcoming, share values and resources.

Participants typically perceived they live amongst like-minded people, though they accepted not all people shared the same values around kauri dieback.

"People know who I am, they have time to talk, it's like living in a small country town."

"I think there's a really strong sense of community in Titirangi, at the local street level but also on a sort of wider village level as well. Everything is quite connected."

Conservation mindset

Many participants suggest a strong conservation ethic exists in the community, with protecting the integrity and health of the bush being central to this. This conservation/protection mindset extended to other environmental concerns like birds, pest control, weeding etc. Participants spoke with pride for this mindset and ethic, implying it was of a higher priority than in other areas of the city.

"People are very very aware of their environment – that's why they like to live here."

"There's conservation movement has just grown, gone crazy in the area, people have just got on board, kids have got on board."

Connection to nature

Core to participants' connection to the area was their appreciation for the natural environment, specifically the bush.
Many participants suggested this was the 'big drawcard' or main reason they had been attracted to live in Titirangi.

Participants generally believed they shared this appreciation and connection with other residents.

"The fact I've got trees out the back, and can go for walks, to get grounded. To get space."

Legacy/future

Many participants expressed how important the bush and kauri was to future generations, how they lamented the idea these generations might not benefit from it as they have.

Participants also spoke of how important it was that future generations respected and understood how precious the bush was.

"It would be good to have the legacy to leave behind for our kids and their other generations."

"Children have to have their eyes open to this, and to have this validated by adults."

How do we work as a community?

BEHAVIOUR & ACTIONS

Groups/initiatives

Multiple community-led environmental initiatives exist, from informal neighbourhood working bees to expert-led action groups. These initiatives are formed around awareness-building or making a positive practical impact, protecting, correcting or maintaining aspects of flora and fauna.

Our participants mentioned pest and weed control, often focusing on collective impact through voluntary baiting and trap lines or semi-regular weeding etc.

Participants suggested initiatives around kauri were mostly around awareness and education rather than action.

Participants suggested time, rather than interest or enthusiasm was a barrier to their involvement, that residents with more time were more likely to be involved.

"When initiatives start up to protect what we've got here, the local people get involved into activities. Not just forests, it's weed control, pest control, a lot of local activity."

"It's a bunch of local environmentalists who banded together to spread the word and get people signed up and it's just from door knocking, handing things out and getting people on board."

Channels

Information and knowledge was primarily shared at a grass-roots level, person-to-person, through word of mouth as well as flyers, noticeboards and signs at information hubs.

Facebook groups and newsletters helped participants gain a wider perspective beyond their immediate neighbourhood.

Participants suggested a small number of motivated and influential community champions had success rallying support for community initiatives, especially environmental concerns.

Lectures and formal information sessions enjoyed awareness through all these channels, but our participants suggested their attendance was occasional only.

"We find out about community events by word of mouth, signs at the top of the road."

"I turn to my neighbours, they have the knowledge, they share the same concern. They've lived here."

What do these trees mean to us?

RELATIONSHIP WITH KAURI

Pride/reverence

Participants acknowledged the unique ecological qualities of kauri as a native species and 'giant' of the forest.

Participants typically felt a reverence and pride for the tree as a symbol for strength and survival, a New Zealand cultural pillar.

This pride seems to stem from both Māori and Colonial history, and is amplified by the fact the trees are concentrated in Titirangi.

"Those trees are amazing, our forest giants, they are an absolute national treasure, to lose one of them is a huge tragedy."

"Nobody would dare to say they didn't care about the kauri, that's so not New Zealand."

"Even across the globe there aren't many tree species that are of that huge magnificence, that history."

Emotional/spiritual

Many participants described a spiritual connection with kauri, affecting them emotionally. They felt this connection while being around or touching the trees, feeling their presence with a sense of awe, godliness, joy or healing.

Some participants referred to the trees in human terms, as being friends, neighbours, family.

"The feeling the trees give me is joy, I feel embraced when I'm in the safety of bush. It's important for us."

"On a daily basis I look at that dead tree and it makes me so sad. It's almost like losing a friend."

"In the presence of a mighty tree like that I can feel moved, almost to tears at times. You beauty, wonderful."

Conscience about impact

Some participants felt conflicted by their values and actions, that their enjoyment of living with kauri meant compromising the trees' wellbeing. This values clash was illustrated most clearly when buildings were close to trees - the building might impact the tree, and vice-versa, raising a conflict of conscience around their proximity to the trees they cared so much about.

"Why do we think we have to interfere, to save them... It's for our pleasure really, because most people love to see the kauri."

"Ultimately, our house shouldn't be here. If the kauri are the most important thing, but we want to live here ... so you live with this contradiction constantly, if you have a conscience."

UNDERSTANDING AND IMPACT

How can I learn more?

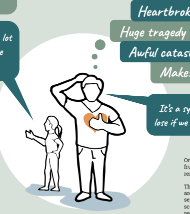
UNDERSTANDING DIEBACK

Learning curves

Understanding kauri dieback is perceived to require a significant investment reading dense academic or technical texts. It seemed the investment required wasn't the limiting factor, but the lack of a satisfying reward, of understanding coming from reading the material or attending an event.

"Unless you go and download documents and there's many pages of study, with language which is too hard to read..."

"I did a lot of reading and went to a lot of information sessions to educate myself, but it's very complicated."



When expressing their understanding of kauri dieback participants used terms like 'apparently' and referred to a body of experts or voices as 'they' suggesting they lack a unified source of truth and understanding around kauri dieback.

However, most participants agreed...

Kauri dieback is:

1. complicated and multifaceted.
2. not yet fully understood.

Knowing what to look for

Residents become aware of dead trees from noticing their bare crowns, but aren't sure what to look for to notice if a tree is dying. This leaves some residents feeling they don't notice until it's too late.

While there was some awareness of weeping, most participants couldn't identify the difference between this and the gum of a healthy tree. Even those who had been trained by experts in identification of kauri dieback had difficulty in identifying the disease compared to other environmental or pathological stresses.

"Even in the easiest forms of recognition, it's really hard to distinguish."

"There's the weeping, but I wasn't aware of that, and it's quite difficult to tell."

How do I feel about losing kauri?

EMOTIONAL IMPACT

Loss, urgency, helplessness

Residents feel strongly about the potential of losing Kauri. From a single tree, to the species as a whole.

They used words like:

Grief · Saddened · Upsetting · Immensely devastated · Heartbroken · Hate to lose them · Huge tragedy · Terrible · Distressing · Awful catastrophe · I couldn't bear it · Makes me want to cry

"It's a symbol to me of what we stand to lose if we don't look after the environment."

On top of this, participants expressed frustration at not being able to personally help remedy the issue.

This was amplified by a sense of urgency around the spread of kauri dieback, and a sense progress wasn't being made at levels of; scientific understanding, government / regional policy or practical remedial action.

"It's happening, and by the time people realise it's happening, it's almost too late."

On seeing the dead trees

The sight of dead or dying trees, signage and track interventions can all be triggers for a sense of loss – of amenity and the trees themselves. Participants who knowingly lived around dead or dying kauri trees daily carried an ambient anxiety, amplifying their sense of helplessness.

"The trunks look stark, there's no leaves, it's like a ghost, as you look across the suburb, you can see the ghosts. That's an irrefutable fact."

"It effects me that so many kauri are dying, because there's a kauri dying, completely dead right out that window."

What does this mean I have to do differently. How do I feel about this?

PRACTICAL IMPACT

Inconvenience/loss of amenity

Participants typically lamented the loss of the track network – a valuable and practical part of their lifestyle. Participants described how integral the tracks had been to their enjoyment of the area, through walking access (micro-commuting and short-cuts) immersion in nature, fitness and recreation (local loops) and impromptu social interaction while walking.

"I'm angry when I can't use this track any more, which means the whole loop I used to do is not possible."

"It's definitely a loss to the community, like the neighbourhood or the street even just not be able to use these connections."

For many participants there was a clear tension arising from sacrificing their own wellbeing for that of the forest. Some participants also acknowledged the loss to others outside of Titirangi, who also had reduced connection with nature and associated wellbeing. This sentiment came with a recognition that access to the bush is beneficial to all who have the chance to visit.

Degraded experience

Some participants felt the track upgrades and signage took away from their ability to appreciate the bush. Walkways and gravel in particular gave them a feeling of being disconnected from nature.

"They are not tramping tracks any more, they are metal paths with steps. You're actually not on the ground. To me that's not tramping."

Forced to drive

Participants expressed how a lack of footpaths in the area makes walking dangerous, especially for kids, now the local track network is closed.

Participants were frustrated at being limited to driving, for the inconvenience and the environmental impact of using their vehicle for short trips, like picking up kids from bus stops, where their kids would previously walked.

"It's a real shame now if we want to go to the park it's a drive, because there's no footpath on the road that goes down to the park."

"That was a really safe, quick route for the kids, but now they have to walk around the main road, where there's no footpath."

Liability

Participants with kauri on their property felt a sense of liability for the trees. If the tree becomes infected, they know it can pose a danger from falling branches, and a financial cost for felling the dead tree.

"It's not just about wanting to protect the trees, it's a financial and safety cost for the owners who have these trees."

APATHY

Disinterest. Lack of urgency

A minority of our sample had a limited appreciation for kauri, though did understand the trees were at risk. These participants described a fleeting interest in kauri dieback as a passive response to media, compared to the more active, information-seeking majority of our sample.

These participants typically did not have kauri on their property, were not significantly impacted by track closures, had low/no awareness of the extent of kauri dieback and didn't show the same emotional connection or reverence towards the tree as the majority of our sample.

"Once I got the gist, I never really looked further into it."

"I'm interested, but it's just another thing, I'm not going to go pursuing it."

"The squirt thing just cleans your shoes of the soil that's about as detailed as I got into it"

Is the community on board with this?

TRACK CLOSURE & CLEANING STATIONS

Compliance

Participants in our sample typically suggested people using the tracks were compliant with cleaning station protocol and staying on track.

These were assumptions based on their observations, often from frequent use of the tracks themselves.

"Most people, 95% of people are pretty good at washing their shoes, that's the locals."

"I haven't noticed anyone that's jumped the fence or split the fences, um everyone is quite respectful I think."

Local/visitor

Some participants felt visitors to the area may not share the same level of appreciation for the bush or awareness of kauri dieback, and so not be as likely to comply with track rules. This sentiment was based on their assumption, rather than observation.

"The non locals might not have as much appreciation, it doesn't mean as much to them as it does to me or the locals."

"It's of less significance to people who just come in, do a walk and drive off."

"For the people who don't live here, they might have a different view. Not thinking long term."

Non-compliance

Participants suggested a small number of people are resistant to track closures, use closed tracks, and/or don't use the cleaning stations. It is believed these people feel they have a right to use the bush or have lost their patience with the closures and rules.

Participants who lived near closed tracks spoke of observing track use, suggesting this was locals who were flaunting the rules, although some signs of non-local use were also observed.

"People can't be trusted, people are on the track all the time."

"They are mostly locals who have just had enough."

Some participants described using short connecting tracks through neighbouring private land, suggesting they were able to manage the risk themselves through careful and limited use.

"Most people respect the rahui but there are always a few diehards who'll say it's their right, it's a park and 'It's my god-given right, I've lived here for years'."

Blind compliance. Acceptance - we have to do 'something'

Most participants were accepting of the closures as a necessary step to protect the trees, despite many not being convinced this was a complete or effective solution. They weren't aware of any other way they could use the bush without contributing to the problem.

Some participants referred to track closures and cleaning protocols as 'better than nothing', or 'at least its something' with a sentiment perhaps calming their conscience about using the designated tracks under these constraints.

"Track closures ... If that's what it takes, that's what it takes."

"I will go with the current stuff, slosh my boots for sure, but I don't know what else to do."

MINDSETS AROUND MANAGEMENT

What is really known about dieback, and how are the responses playing out?

Doubtful

Not knowing

When asked about their understanding of kauri dieback and how it was being managed, participants shared how they held significant doubt. There were many fundamental aspects around which participants weren't clear.

"I don't know 100% about it, nobody does to be honest, what causes it and why?"

"I don't know whether it's environmental or human, it could even be from pesticides. I just don't know."

We're not clear...

- Whether dieback is fully understood?
- What's causing it?
- How extensive is it?
- Whether any interventions to date are proven to help?
- How long the restrictions might be in place?
- Who's leading the charge on getting these answers?
- When there might be clarity around any of these?

Drivers of doubt:

Exceptions, anomalies

Participants described a plethora of anomalies and alternative explanations to kauri dieback, based on:

- **Things they've heard or read** e.g. 'It's been a dry summer'
- **Their observations** e.g. 'Why is one tree dead but not the one next to it?'

Participants gave examples where inconsistencies didn't sit with their own logic, like: why the top of the tree dies if it's soil borne, or why an isolated tree can be affected.

Regardless of the source or logic, every alternative explanation brings with it another reason to query any commonly held explanation.

"Why do some get, and some right next door not get it? is it just the survival of the fittest?"

"We've also had a couple of really dry summers, which affected our trees, so to me it was a drought thing, but we don't know."

Own theories

In the absence of reliable or clear information, many of our participants derived their own theories on how kauri dieback works.

These theories ranged from; the causes of dieback to how it's spread, how the tree dies, to why some trees get it while others don't, to whether or not humans have an influence.

Participants expressed these theories with a degree of bewilderment the facts were not clear to them. It appeared they'd much prefer to know for sure than improvise with their own conjecture.

"It's possibly come about from global warming, the core temperature rising, but honestly, I don't know."

"That's because some of them are probably weaker than others. It could just be Mother Nature's way."

"I don't even know, and I actually work for Council."

Disillusioned

Do they even know?

Many of our participants doubted whether the experts had the answers to questions they sought. Conflicting and inconsistent rationale had fuelled this doubt, in addition to many participants hearing directly from experts how inconclusive their understanding is.

Participants who heard this first-hand expressed disillusionment at the fact the experts didn't have these answers.

There was some empathy for the scientific community, given how effects can take years to become visible, but this didn't leave them feeling any more secure progress was being made.

"I think it could be spread by shoes as well as airborne or a bug I don't think they 100% know, or it would be stopped by now if they do know."

"Even the biologist I am in contact says she doesn't know whether what we are doing is working. Maybe it will be 5-10 years."

Disconnected

Lack of feedback

Participants' doubt and lack of clarity around how dieback is understood and being managed was amplified by a lack of feedback or conclusive information over time. Participants were clearly frustrated and felt they were 'left high and dry' without hearing anything in the way of progress or outcomes from any leading agencies.

"If the people who' are studying it actually know, they haven't been well communicated to the public."

"Even if they don't know, but this is the most likely thing to help our kauri survive, then this needs reinforcing."

"It would be nice if they said how they were going, a report for the public to say whether it's getting better or worse. Let us know."

Two schools of thought

existed in response to this lack of feedback; One was to assume 'they are onto it' and so **'no news is good news'**. The other was to assume there was no progress being made. **'no news is bad news'.**

Most commonly it was assumed Auckland Council would be the source of this feedback.

Distrust

Disappointed by Council

Many participants held a distrust for the way council is managing kauri dieback.

"There's a distrust towards council and authorities who are taking things away from us."

"We need a really good study and clear understanding of the issue, how it affects the forest, but there has to be a trust of authority to actually have the study not seen as a load of rubbish."

These feelings stemmed from perceptions of:

- Varying and contradictory approach to tree preservation,
- Kauri dieback being treated as a local issue rather than regional or national,
- Deprioritising of effort and investment in this area compared to other issues,
- Exercising priorities around other projects felt to be detrimental to the environment.

Ambiguity, contradictions & mixed messages

With a lack of clear information about how the current management of kauri dieback is going, participants were left to judge the Council on their behaviours and actions. In these they often found inconsistency in approach, seen as hypocrisy to some participants.

"If we are supposed to be protecting them, why are we cutting them down?"

"The conflicting information seems to be 'we don't really know what's going on, we kinda have an idea but we don't really'."

Some examples from our participants were:

- Saying one thing, then doing another. (felling protected trees for development purposes),
- Not requiring dogs' paws to be cleaned while going to great lengths to have shoes and boots cleaned,
- Different departments offering different messages around approaches to managing dieback,
- Council operators not following their own rules in terms of process (driving trucks through mud on sites with kauri),
- Erecting new signs pointing to tracks which are closed,
- Working hard to protect specific trees, but leaving neighbouring examples to die (McCahon House).

POSITIVE CHANGE

What we'd like to see in the future:

1 Save kauri at scale

More/better should be done

Participants commonly believed research into dieback was critical, but under-funded, expressing disappointment at their perception of the level of investment in research. Most participants hoped for a more concentrated and scaled effort in response to kauri dieback as a result.

Lack of communication and feedback from research was again held up as amplifying this disappointment.

Many participants felt the mandate to address kauri dieback should be elevated to government level, treated as a national emergency, with support from the scientific community.

"It should be the government saying we cannot lose this iconic tree, this is a natural treasure."

"There could be more funding put into the study and clear communication, that would help."

2 Communicate

Keep us informed

Many participants felt frustrated at the council's communications and information around kauri dieback. They felt the council had dropped the ball in terms of clarity, consistency and regularity of communication.

In comparison, some participants appreciate regular and data-rich communications from environmental agencies, providing useful, informative feedback. Number of possums trapped etc.

Several participants suggested the scientific community and government should manage kauri dieback response and communication in a similar way to Covid19 (unified, clear and action-oriented).

"We need a 'kauri champion' like Ashley Bloomfield, I will answer your questions, I will let you know what's going on. It's very diffuse at the moment."

"With Ark in the Park we get a weekly newsletter, maps of how many of which predators have been caught exactly where. It's actively communicated, all the time."

3 Enable us

We just want to do something

Most participants were compliant and motivated to help 'do their bit', understood the value and strength of their community as a part of the response, but were frustrated and disempowered at not being sure whether their personal or collective actions were contributing positively to saving the kauri.

This feeling of frustration was a contrast to the immediacy and clarity around what to do to help other issues (weeding, rodent baiting etc.).

Our participants suggested they wanted a unified, clear message and practical calls to action they could respond to, trusting these were effective.

"I don't really know what they want from us. I'm prepared to be part of a solution, I just don't know what my role is."

"The agencies don't know what to do with people like me, who are really keen to help."

ABOUT THIS RESEARCH

Peri-urban areas at the fringe of urban and rural (forested) areas often present significant challenges for natural resource management as they attract a variety of residents, often with diverging perspectives regarding environmental protection.

This collaborative study by Massey University and Scion investigated the attitudes, beliefs and behaviour of a unique peri-urban community – Titirangi – relative to kauri dieback.

We interviewed a diverse range of residents over several days, exploring the enablers and inhibitors of recommended pro-environmental action in this space.

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