

# KauriKonnnect 19

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## The new Keep Kauri Standing website



## Our place in cyberspace

The web and social media dominate how we seek and share information – young and old alike. So, to facilitate “spreading the news, not the disease,” Stacey Hill (Auckland Council/E&BC team member) has been leading a project to revamp the kauri dieback website and get it independently hosted. The current site is a hangover from the old ARC days.

The design of the site ensures that information is easy to find, promotes the Keep Kauri Standing brand and reinforces the key behaviours we’re encouraging – staying on tracks and removing soil.

As Stacey says, “The previous site was OK, but only OK. The new site gives us a dynamic look that strongly reinforces the Keep Kauri Standing message. It also has layers of content that we can continue to add to over time. Adding in links to Facebook and email will help visitors to the site pass the

### The old website



programme’s message on to others. Visitor analytics will also tell us who’s visiting, where they have come from, how they navigate around the site and how long they spend on the site so we can respond to customer demand.”

Content will be updated regularly to keep the site topical. An overhaul of the technical content is also happening progressively. 🌲

Check it out at [www.kauridieback.co.nz](http://www.kauridieback.co.nz)

We suggest you cut and paste this link and add it to your email signature panel so that you help spread the word.

## Kaitiaki Konnecting

Since first learning of kauri dieback, tāngata whenua throughout the kauri catchment were keen to be involved in an issue critical to the health and wellbeing of their taonga, the mighty kauri. One of the ways this has happened is through the establishment of a Tāngata Whenua Roopū (TWR) where interested marae, hapū, iwi and Māori owned Land Blocks can nominate a representative to sit on the TWR. TWR provides advice from a tāngata whenua perspective into all aspects of the long-term management programme and nominates tāngata whenua representatives to all lead and workstream groups. They also receive regular updates from the wider response.

Waitangi Wood (Ngā iwi o Whangaroa), a tāngata whenua representative on the Lead Team says, “We know that our kaitiaki (environmental managers) throughout the kauri catchment are busy and the Tāngata Whenua Roopū is but one way they can be involved in this important kaupapa (issue). The other is through email updates and newsletters, such as Kauri Konnect.” She noted that it is critically important that local mana whenua are involved and TWR has worked as part of the response partnership to ensure this occurs wherever possible. TWR also worked with the partnership in the commissioning of a cultural effects assessment, development of a framework to consider cultural health indicators for kauri and kauri forests, selecting sites for surveillance and so on.

Kaumātua (elder) Hori Parata (Ngāti Wai), who chairs TWR and is a tāngata whenua representative on the Lead Team said, “It was important for TWR to test ideas and concepts with kaumātua and, while TWR members report back to their own kaumātua, TWR wanted to get an idea from kaumātua how they wished to inform or be involved in the long-term response and management.”

This led to a hui in August where some 35 people attended over a two-day period to get an update on knowledge about and progress with responding to and managing PTA. A further hui is scheduled for the New Year to provide kaumātua with updates and to also hear from them how they wish to inform the mahi (efforts).

“We look forward to a lively, informative discussion. Like the kauri our kaumātua are a source of wisdom and strength,” said Ms Wood. “Kaumātua are the repositories of our mātauranga, our ancient and modern knowledge and knowledge systems and we may even see, from the mists of time, an ancient response to a modern disease. Here’s hoping!” 🌿



**Tāngata Whenua Roopū members**

## Cunning plans from the Planning and Intelligence group

Here's a snapshot of recent and upcoming work in the programme's engine room:

**PTA Surveillance 1.** This covered 15 forests in Northland, Coromandel and Great Barrier Island with 96 samples taken and six positive sites identified. All of these sites were associated with known history and/or indicative symptomatic trees.

Three of the sites were linked with the Waipoua nursery and specific periods in the 1950s where we suspect kauri dieback was moved with soil and seedlings. The positive sites included plantations at Glenbervie, Omahuta and Waipoua; a natural near-track site at Waipoua; a site that may have historically been grazed under at Okiwi (Great Barrier Island); and a site in an area that was a major management area in the New Zealand Forest Service times at Punaruku in Northland.

Random placement at other sites and discretionary samples taken while accessing those sites near tracks and roads returned not-detected (negative) results. This indicates that kauri dieback was not detected at all forests and sites and was not detected at any of the six sites that were sampled in the Coromandel. One site on Great Barrier Island is not linked with past New Zealand Forest Service activities or tracking and roading and needs further investigation during ongoing risk assessments.

The results from surveillance 1 and the new information that we have from the use of the field sampling and laboratory procedures which has been tested in the recent Waipoua field sampling have been fed into the

design of Surveillance 2.

Results from surveillance 1 have been communicated to land owners, managers and tāngata whenua of the sites and planning is well advanced for visits to the six sites which tested positive. Meetings will be held at each site to discuss appropriate responses which may include further testing, restricting access, installing signage and/or provision of cleaning stations.

A media release we sent out received good coverage.

### PTA Surveillance

**Plan 2.** The Plan describes the design for Surveillance 2 where a range of sites across the full distribution of kauri will be sampled and tested. There are some follow-up sites from the first round of surveillance but most are new sites. Tender documents for the sites that will be grouped into zones are being prepared. It is proposed that this could include up to 120 sites – four times bigger than Surveillance 1.

**Aerial Surveillance Plan.** This plan involves the use of aircraft to survey all kauri forests for visible signs of kauri dieback (see article KK18).

Experienced “spotters” will be in the aircraft and all potential dieback sites will have GPS coordinates taken for later follow-up. Sites may get additional, more detailed, aerial assessment before ground follow-up. This work is now at the stage of obtaining quotes from potential contractors.

An additional form of surveillance involving the use of satellite technology to depict kauri forests and PTA symptomatic kauri trees is also to be explored. The

use of the Digital Globe Worldview Two technology (or similar product) will be assessed for its usefulness to the kauri dieback response.

## Dirt on kauri dieback confirmed

A recent survey has confirmed the importance of removing soil from footwear and equipment before and after entering areas with kauri trees to combat the spread of kauri dieback disease in Northland.

The survey involved testing soil samples for the deadly fungus-like disease specific to kauri that is believed to be spread by soil movement.

Samples were taken from sites where human soil movement was possible and were taken across Northland, Great Barrier Island and Coromandel within 12 newly sampled forests and two where kauri dieback was known.

The survey was implemented jointly by MAF, the Department of Conservation, the Northland Regional Council, Auckland Council, Waikato Regional Council, Bay of Plenty Regional Council and Māori.

Most of the tests did not detect the disease, but the disease was found to be present in Omahuta, Glenbervie and Russell Forests in areas where there had been previous kauri forestry activity. Other sites with the disease have been identified in Northland, Auckland



DEADLY: Kauri dieback is killing Northland's kauri trees. PHOTOFILE

## Battle on to beat kauri dieback

Recent survey work has confirmed the importance of removing soil from footwear and equipment before and after entering areas with kauri trees.

The survey involved taking soil samples and testing them for kauri dieback disease. Kauri dieback is a fungus-like disease specific to kauri and is killing trees – young and old. It is believed to be spread by soil movement.

Samples were taken from sites where human soil movement was possible and were taken across Northland, Great Barrier and Coromandel within 12 newly sampled forests and two where kauri

dieback was known.

The survey was undertaken as part of the programme to manage kauri dieback disease, implemented jointly by MAF, Department of Conservation, Northland Regional Council, Auckland Council, Waikato Regional Council, Bay of Plenty Regional Council and Māori.

Most of the tests did not detect the disease, however the disease was found to be present in Omahuta, Glenbervie and Russell forests in areas where there had been previous kauri forestry activity. These join previously identified rural, forestry and natural bush land

sites with the disease in Northland, Auckland and Great Barrier.

Kauri Dieback group chairman John Sanson says: “The joint programme partners are working with land managers, tāngata whenua and

landowners to ensure appropriate measures are taken to limit further spread of the disease where it has been detected. A range of measures will be considered, including further soil testing, restrictions on access, installing information signage and providing cleaning stations for forest users to clean footwear.”

Landowners and users of

the kauri sites where the disease has not been detected are also being encouraged to continue preventative actions of removing soil and staying on tracks to protect these forest areas from the disease.

Mr Sanson says: “The soil testing programme is important for us to understand the disease spread and impacts. But we ask all landowners and forest users to take action, because all areas with kauri trees are vulnerable to the disease and we must all do what we can to protect these taonga.”

Further information on kauri dieback is available at [www.kauridieback.co.nz](http://www.kauridieback.co.nz).



**Further activity** includes:

**Genetics** of kauri and any possible natural resistance there may be in the species to PTA. Leaf samples from a wide range of kauri forests will be collected for genetic sequencing which will provide an indication of the variation within kauri and the potential for resistance to kauri dieback.

**Control tools.** Site selection to field test phosphite as a possible control tool for individual kauri trees is also underway. There have been promising results from laboratory trials by Plant and Food Research and field trials is the next stage in this programme. Field tests will trial different concentrations in healthy kauri trees to ensure there are no negative impacts from the treatment itself as well as testing the overall effectiveness of phosphite treatment. These sites will need to be monitored for many

years before conclusions are made about treatment effectiveness. It is planned to complete the treatment of trees by the end of the year.

Further work on the **performance indicators and measures** for the entire kauri dieback response programme is happening so progress can be measured.

Work continues on a comprehensive **Guide to Track Management** on land containing kauri which is aimed at preventing the introduction and spread of kauri dieback on public walking tracks.

Ongoing examination of kauri dieback vectors

currently involves **consideration of farm stock**, particularly cattle and their movement between sites.

The **Forest Amendment Act** approval process for logging individual kauri trees is being examined to consider a variety of issues including spread of PTA through kauri harvest. The main danger is with logging that can cause root damage, disruption of natural drainage patterns and the spread of PTA material from site to site via dirty diggers, trucks, bulldozers and other gear.

Preparations are being made for a second visit by **Dr Joanna Young**, who has been sharing her knowledge from the Australian Phytophthora dieback experience. Her advice and support was extremely useful during her first visit during October.

<http://www.dieback.org.au>

<http://www.dieback.net.au>



## Three generations of Kaitiaki and Waipoua Surveillance

**Surveillance 1 created the opportunity for mana whenua to be more informed about kauri dieback and participate in training to actively assist the programme. Surveillance 2 will create even more opportunities for involvement.**

As an example, Will Ngakuru, from the programme Tāngata Whenua Roopū and Planning and Intelligence team member backgrounds the recent sampling programme in Waipoua that Te Roroa took a lead role in.

Waipoua forest is home to many of our oldest Kauri, Tane Mahuta, Matua Ngahere, the Yaka's tree to name a few, these giant trees support an incredibly diverse and delicate ecosystem which draws as many as 250,000 local, national and international visitors per year.

For centuries and prior to Captain Cook discovering New Zealand, Waipoua forest has been home to Te Roroa – the local tāngata whenua. Generations of Te Roroa have gardened and hunted in Waipoua. With the arrival of industry they were employed as sawyers, gum diggers, tree climbers, road builders. With the New Zealand Forest Services came work in the pine plantations and nurseries then NZ Forest Service disbanded and the Dept of Conservation was formed again Te Roroa have continued to work with, along side or even against if need be. As Te Roroa kaumatua Daniel Ambler says, "We do not own the forest, we belong to the forest and the forest belongs to us".

Through the many changes Te Roroa have adapted and maintained their connection to Waipoua but the threat of PTA is unlike any faced before. It threatens not only kauri but the entire kauri ecosystem which includes species like kokako and kiwi.

The Kauri Dieback leadership team have supported tāngata whenua participation in the programme through provision of training and opportunities for involvement in surveillance, and are keen to investigate future monitoring needs and how this can be delivered.

Local knowledge of site history, special historical sites including wahi tapu and kauri plantations, soil disturbance, access, local government, NGO and landowner relationships means Te Roroa involvement can add significant value.

The surveillance team took samples from Waipoua forest, Trounson forest and ex-Forest Service kauri plantations on Te Roroa land. The team used a SOP developed by the Kauri dieback response which involves photographing the canopy and base of the tree, records any special features of the site, such as

water movement, pig rooting, tracks etc. Special importance was placed on hygiene, so packs were placed on disposable ground sheets and boots, tools and other equipment was cleaned between each tree. Samples were temperature controlled and monitored to ensure they were not compromised in transit to the labs.

The team was made up of Davey

Paniora of Te Roroa. Davey has lived and worked almost all his life in Waipoua and was taught to climb kauri for gum and seed by his father. His son and grandson were also part of the team. It was great to see an intergenerational transfer of knowledge in practice. Also part of the team were local community members Stephen King (Waipoua Forest Trust) and Tom Donovan (ex DOC staff and a kiwi and kokako specialist). Surveillance training was delivered by Tony Beauchamp (DoC) and Nick Waipara (AC). Many thanks to you both.

We are currently waiting on results which will then help to inform ongoing management of these forests and help in the development of control tools and strategies. 🌲





## Mobilising tourists

With thousands of Rugby World Cup followers touring New Zealand, the Kauri 2000 Trust was concerned about the increased risk of bringing kauri dieback disease to the Coromandel Peninsula. Their cunning response – a bookmark outlining what to do to prevent the spread of this disease on one side and promoting Kauri 2000 on the other. With financial support from the programme partners, they distributed 10,000 of these throughout information centres, Department of Conservation visitor centres, as well as motor camps on the Peninsula. Best of all, when they asked Tourism Holdings to put bookmarks and Kauri 2000 brochures in their Maui, Britz and Backpacker campervans in September and October – around 4000 rentals – they were more than happy to help the cause.

Just before the match between the All Blacks and France, Kauri 2000 coordinator Barb Ritchie met some French rugby fans who had just arrived in the country and were touring the Coromandel before the big game. They had seen the brochure in their motor home and were going to donate a kauri tree! 🌲



## Plantation history – a plea for help from John Beachman

Ever since kauri was noted as such a significant component of the NZ bush, people have raised seedlings and planted them in back yards and on public land.

Although often regarded as an agency with an exotic pines uber alles fixation, the NZ Forest Service, over several decades, established a significant resource of plantation kauri. [Editor's note: 'uber alles' is a German phrase meaning 'before all (others)'.]

These plantations occur throughout the natural range of the species and can be found from near Kaitaia (Raetia Forest) in the North, to Great Barrier, Coromandel and as far south as Kaimai Mamaku Conservation Park.

Most of these plantations are on land administered by the Department of Conservation. Over the last three years or so, as part of my work, I have been compiling a picture of their extent and, where possible, a further picture of their current condition. Old maps and resources have not been systematically archived and there are still some gaps in my plantation records.

NZ Forest Service grew seedlings in several nurseries, most notably Waipoua Forest Nursery, from the late 1940s to the late 1960s and Sweetwater Nursery near Kaitaia from 1974 until 1986.

Some plantations established from Waipoua Forest nursery stock, during the early to mid-1950s, are showing kauri dieback symptoms. There is enough consistency in these occurrences to suggest that some of this nursery soil was a source of kauri dieback infection, and that at least part of the current distribution of the disease has its origin in Waipoua. So far the kauri established from the Sweetwater plantations are not exhibiting any kauri dieback symptoms, but we need to do further work to establish if the changes in nursery management eliminated all risks.

Thus a full picture of the extent of the NZ Forest Service kauri plantations is an important component of tracking some of the distribution of the disease. Areas with extensive dieback including the Waitakere Ranges were not used for NZ Forest Service plantations, and we are unaware of any other links with the NZ forest service nurseries. 🌲

I think I have a reasonably full inventory of the kauri plantations but still lack maps and records of plantations at Warawara, Puketi and Puhipuhi Forests. If any readers can supply records of those plantations or want more information on NZ Forest Service kauri plantations you can contact me at [jbeachman@doc.govt.nz](mailto:jbeachman@doc.govt.nz)

## GIS = Geographical Information System

We now have a system for collecting, storing and disseminating spatial and other data about the programme. Information on the location of cleaning station sites, sign placement, sampling sites and infected sites, etc. has been held by individual agencies but has not been easily available to the other programme partners.

BECA Infrastructure was commissioned to develop a system to address this gap. They have interviewed programme members to determine what the data needs are and what information the partners currently hold. This data and supporting information such as topographical and forest cover data has been loaded onto the system.

The system is currently live for testing purposes. The data is held in a “shared workspace” based on TeamView Collaborate software. Users can download data for developing maps as well as pre-built maps and BECA will also produce maps for programme partners on request.

Mike Harre is the programme’s contact person. 🌲

## Returning the love

Renowned New Zealand artist Colin McCahon (1919–1987) drew inspiration from kauri for a series work back in the 1950s when he and his family lived in French Bay, Tiritangi. The old family house has been purchased and restored by the McCahon House Trust and is open to the public.

The Trust have joined forces with Auckland Council to promote awareness and action around kauri dieback. This is particularly pertinent as many of the kauri in the area that were flourishing in McCahon’s day are now suffering from the disease.

The community meeting, lead by presentations from Nick Waipara and Jack Craw, provided a forum for spreading knowledge of the disease and the actions people can take to help.

<http://www.mccahonhouse.org.nz/house/>

<http://www.mccahonhouse.org.nz/fifties/5360kauri5357.asp> 🌲



**Colin McCahon. ‘Kauri’. 1953.**  
Private collection. Image reproduced with the permission of the Colin McCahon Research and Publication Trust

# Newsflash<sup>1</sup>

» **The Auckland Zoo** forest experience is up and running and includes reference to kauri dieback (see headlines KK18)

### » Mobile billboards

– some staff with public contact roles are trialling a range of promotional polo shirts.



They carry the Keep Kauri Standing brand and the “call to action” behaviours we’re encouraging (staying on tracks and removing soil). The recent E&BC team meeting in Whangarei provided a New Zealand’s Next Top Model opportunity. Ian Mitchell, newly appointed Relationship Manager, is far right. (Editor’s note: Don’t give up your day jobs team!)

### » Local government awareness

– a recent briefing session with Len Brown was another profile opportunity for him and us. Generating an understanding of kauri dieback and the programme response with local and national politicians remains an important part of our activity.



## Blast from the past

Reminders of previous articles and other interesting items

### Dr Ross Beever 1946–2010

We stand on the shoulders of giants as we advance the cause of understanding and containing kauri dieback. It is timely to remember and honour one of those who, sadly, is no longer with us – the revered Ross Beever. Ross pioneered so much of our work and we can think of no better précis of a rich, but tragically short life, than the obituary prepared by the Royal Society of New Zealand Te Aparangi.

<http://www.royalsociety.org.nz/organisation/academy/fellowship/obituaries/ross-ewen-beever/>

### Earth, birth and girth

Back in the 1980s there was quite a bit of interest in the relative sizes of kauri. Above is a list compiled by Halkett (1983) of the “top 20” big kauri ...and the figures for trees 4, 5, 10, 11, 15, 17 and 20 were field measured by our very own John Beachman.

John is not aware of any subsequent recompilation of this list and he notes the criteria for size was wood volume, which irritates some people but it is at least a uniform size yardstick.

The list is not definitive. There are other large trees such as the “phantom” kauri at Waipoua and Hori Wehi Wehi in Russell forest and John thinks at least two of the trees on this list have collapsed – Taniwha in Omahuta and either the McGregor or Cockayne tree in Waipoua.

TABLE 2 - List of 20 largest known kauri

Ranking (by volume)	Name	Locality	Girth (m)	Trunk height (m)	Total height (m)	Trunk volume (m <sup>3</sup> )
1	Tane Mahuta	Waipoua	13.77	17.60	51.5	244.5
2	Te Matua Ngahere	Waipoua	16.41	10.21	29.9	208.1
3	McGregor kauri	Waipoua	13.69	12.25	40.8	170.6
4	Te Tiroi o te Tui	Puketi	12.38	13.10	50.9	155.1
5	Moetangi (No. 1)	Warawara	11.06	20.03	49.0	149.0
6	Tanemai	Manai	10.08	18.29	47.2	135.7
7	Yakas	Waipoua	12.29	12.04	43.9	134.2
8	Hokiangi	Omahuta	9.58	20.73	53.3	131.1
9	Tairua (No. 1)	Coromandel	9.78	22.86	49.7	128.3
10	Moetangi (No. 2)	Warawara	10.62	11.44	-	118.5
11	Moetangi (No. 3)	Warawara	10.10	10.60	-	117.8
12	Taniwha	Omahuta	9.70	17.07	44.2	113.0
13	Otamakite	Coromandel	10.54	13.82	41.7	110.6
14	Devilish kauri	Coromandel	10.54	12.55	46.5	101.6
15	Takapau (No. 2)	Puketi	10.59	12.39	39.9	101.1
16	Opitonui kauri	Coromandel	9.68	15.14	41.4	100.7
17	Merumeru kauri	Puketi	12.78	7.01	28.9	99.9
18	Tairua (No. 3)	Coromandel	9.68	12.50	56.3	99.2
19	Cockayne kauri	Waipoua	10.03	16.33	46.6	99.1
20	Takapau (No. 1) *	Puketi	9.63	14.99	39.9	98.5

## Newsflash2

» **Tourist awareness** – Kauri dieback has been featuring on the video displays in the Thames, Pahia and Coromandel tourism i-sites. This was part of the ongoing coverage, but was beefed up to coincide with the increased number of tourists from Rugby World Cup.

» **Konnichiwa Tane Mahuta**. John Kirwan and the Japanese RWC team did a Footprints Waipoua tour as part of their sojourn in the North. We sent a kauri dieback briefing to their media liaison person to share with the team prior to their visit.

» **The Museum of New Zealand Te Papa Tongarewa** have invited the programme to contribute to their proposed display for kauri *agathis australis*. Te Papa hosts well over one million visitors a year, so this represents a valuable opportunity to raise awareness of kauri dieback and what tourists and locals can do to help prevent its spread.  
[www.tepapa.govt.nz/pages/default.aspx](http://www.tepapa.govt.nz/pages/default.aspx)

» **Order forms for collateral and operational material**. New order form templates are now in use by the programme partners. Please ensure all operational orders go to Mike Harre and orders for brochures and collateral are channelled through your E&BC member.



# Comings and goings

## Fiona Bancroft

### Mum

Fiona is on maternity leave and the Bancroft clan was added to on 1 November with the delivery of a bonny, bouncy boy to join his sister, Olivia. Fiona and son are both doing well. We're not sure if the birth date of 1/11/11 was planned or not!

It probably feels like Fiona has given birth/endured difficult labour/gestated a number of aspects of the Kauri Dieback Programme in her role as programme manager. Her astute marshalling of the troops has been appreciated since she rejoined us back in November 2010. The activity of P&I mentioned in this edition is testimony to her passion and drive.

## Liz Clayton

### Programme Manager

Filling (in) Fiona's boots is Liz Clayton who joins the programme from within John Sanson's pest management team.

Liz says, "I joined the Post Border Directorate as a Senior Adviser in the Pests and Pathways team in August 2010. Prior to joining MAF I worked for about 10 years in the pharmaceutical industry before leaving to complete a PhD in cell and molecular bioscience at Wallace Animal Research Centre. More recently I worked as a senior business manager with the Foundation for Research Science and Technology, now the Ministry for Research Science Technology and Innovation.

In the last year at MAF I have been involved in quite a few projects, the biggest being:

- » National policy direction for the changes to the Biosecurity Act.
- » The National Plan of Action for Pest Management.
- » Domestic Pathways pilot programme.

I am looking forward to continuing Fiona's work in the co-ordination and management of this programme and look forward to building on the excellent relationships that she has developed as we progress towards a positive future for kauri."

## Ian Mitchell

### Relationship Manager

A warm welcome to Ian Mitchell our new Relationship Manager. This has been one of the most eagerly awaited appointments, given the opportunities and challenges we have in connecting with our various communities. Ian shares his perspective below...

*Ko Pukenui (Te Ahuahu) Te Maunga*

*Ko Omapere Te Wai Roto*

*Ko Te Kerikeri, Hokianga Nga Awa*

*Ko Kupe Te Tangata*

*Ko Arthur Edmonds raua ko Erana Kareariki Pehiriri nga Tupuna*

*Ko Matawhaourua Te Waka*

*Ko Ngapuhi Te Iwi*

*Ko Te Uri Taniwha Te Hapu*

*Ko Ian Mitchell taku ingoa*

*Tena ra koutou katoa.*

*Tu Kaha te Whare Tapu o Ngapuhi*

*Tu Tonu te Kauri!!*

*Hi, I am Ian Mitchell; I am of Māori, Irish, Welsh and English descent. My Māori blood line centres around Lake Omapere and extends to Kerikeri Inlet and Hokianga. Stand strong the Sacred House of Ngapuhi, Stand forever, the Kauri!*

My role is partly liaison and partly community engagement, and all about communication.

**In terms of liaison:** within the Kauri Dieback Programme are a number of "partners". The partners are the agencies that jointly contribute to the Programme and include Tāngata Whenua Roopū (where all hapu and iwi affected by the Kauri Dieback Disease are represented), MAF Biosecurity, Department of Conservation, Northland Regional Council, Auckland Council, Waikato and Bay of Plenty Regional Councils.

Within the Programme there are a number of lines of research being undertaken, we are learning a lot about the disease, mainly around where the disease is located, what controls are effective and how we can manage kauri forests to minimise the impact and spread of the disease. We need to weave in our indigenous cultural knowledge with our scientific knowledge to be as effective as we can be to halt this disease.

It is imperative therefore that there is good, open, continual, consistent communication between the partners. In my liaison role I hope to be effective at sharing both the cultural and the scientific knowledge, so all parties can be up with the play, consistent, and effective.



Ian Mitchell continues...

**In terms of community engagement:** ultimately, the Kauri Dieback Programme has to get out there and connect with the community. We need to make the community aware of the extent of the problem and to work out with the community what are the best approaches to solving the problem. We need to be effective in building up an awareness of this disease within our Forest-User communities and to be consistent in our messages to these various communities, across Aotearoa. Communities as diverse as: Mum, Dad and the kids on a Sunday drive, overseas visitor backpackers, pig hunters (and dogs), whanau hapu kaitiaki, and mountain bike riders, for example.

I have lived in Hokianga for 20 years. We are a close knit community, who look out for each other, and we are used to making the most of what we have – we still use no.8 wire! I have undertaken community

advocacy roles for many years, including Board of Trustees activities, Environment Court appeals and Whanau Trust Tangata Whenua advocacy. In recent years I have worked for Northland Polytechnic as a tutor in horticulture, ecology, business and sustainable development. I have been self-employed as a Tree Doctor and Business Consultant and I garden and orchard at home.

I have a lot to learn and a lot to catch up on, but I am very excited and honoured to be in this role, as one of a team, to help protect our taonga, the kauri.

*Tena ra koutou nga kaipanui, nga mihi. Ahakoa he raruraru iti noiho ki tenei kaupapa, Tu Tonu Te Kauri, waea mai, 029 8940773.*

If you have news, information or problems about the Kauri Dieback disease, especially in regard to stakeholder liaison and community engagement, please do not hesitate to contact me, 029 894 0773.



# KEEP KAURI STANDING

STOP KAURI DIEBACK DISEASE SPREADING

[WWW.KAURIDIEBACK.CO.NZ](http://WWW.KAURIDIEBACK.CO.NZ)



## The story so far...

Kauri dieback is a fungus-like disease specific to New Zealand kauri and can kill trees of all ages. It's a significant threat to our kauri taonga (treasure) that contributes to our national identity, spiritual wellbeing, economic prosperity from tourism and our overall biodiversity and interconnected forest ecosystems.

Microscopic spores in the soil infect kauri roots and damage the tissues that carry nutrients within the tree. It is believed to be spread by soil movement, so forest users must clean all soil off footwear and equipment and stay on tracks. Infected trees show a range of symptoms including yellowing of foliage, loss of leaves, canopy thinning, dead branches and lesions that bleed resin at the base of the trunk.

Since 2009, Māori, MAF, the Department of Conservation, Auckland Council, Northland Regional Council, Waikato Regional Council and the Bay of Plenty Regional Council have joined forces to cover research into the detection and spread

of kauri dieback, methods to control it and public awareness campaigns to help stop its spread.

Efforts are focused on limiting the spread of the disease and protecting uninfected locations. Information is being shared with landowners, visitors, community groups, journalists, clubs and event managers to help build awareness, understanding and action around kauri dieback. A surveillance programme is helping to assess and monitor locations of kauri dieback disease. Research is underway to improve detection methods, increase our knowledge of how the disease spreads and develop effective control methods. Work is also going into improving track construction, drainage and other man-made influences that will help reduce the spread of the disease.

If you think your trees have dieback symptoms, contact the Kauri Dieback Management Team on **0800 NZ KAURI (695 2874)**.



# KEEP KAURI STANDING

STOP KAURI DIEBACK DISEASE SPREADING

[WWW.KAURIDIEBACK.CO.NZ](http://WWW.KAURIDIEBACK.CO.NZ)

**HELP STOP KAURI DIEBACK**

Kauri dieback disease is killing our native kauri. It spreads by soil movement, but you can help prevent it.

**ALWAYS:**

**STAY ON THE TRACK**  
and off kauri roots.

**CLEAN YOUR GEAR**  
Before and after visiting kauri forests  
clean your shoes, tyres and equipment.

For more information call 0800 NZ KAURI.

**KEEP KAURI STANDING**

MAORI TAONGA Kaitiaki Take Kōwhiri  
NEW ZEALAND'S OFFICIAL MASCOT  
Sovereignty  
Department of Conservation  
Auckland Council  
Environment Canterbury  
Forest Service  
Ministry of Agriculture and Forestry  
Ministry of Education  
Ministry of Health  
Ministry of Labour  
Ministry of Transport  
Ministry of the Environment  
Ministry of Tertiary Education, Skills and Employment  
Ministry of Tourism  
Ministry of Water Resources  
Ministry of Work and Income  
Ministry of Youth Development and Sport  
Ministry of Māori Affairs  
Ministry of Pacific Affairs  
Ministry of Police  
Ministry of Revenue  
Ministry of Social Development  
Ministry of Transport  
Ministry of the Environment  
Ministry of Tertiary Education, Skills and Employment  
Ministry of Tourism  
Ministry of Water Resources  
Ministry of Work and Income  
Ministry of Youth Development and Sport