Kauri Konnect 22

KEEP KAURI STANDING
STOP KAURI DIEBACK DISEASE SPREADING
KIA TOITU HE KAURI

Mahi Tahi Hui
Working Together as One

PASS IT ON. **Please spread the word by sending this newsletter through your networks via email or print off hardcopies to pass onto those you meet.**

Are you new to *KauriKonnect*?
Email lynn.mcilveen@mpi.govt.nz to register on the database and you'll never miss a copy.

To celebrate...and challenge for more

Early August saw an important event for the Kauri Dieback Programme, when members of all work streams came together kanohi ki te kanohi (face-to-face) under the banner of working together as one.

Over the years the separate disciplines of tāngata whenua input, planning and intelligence (science), education and behaviour change (communications), operations and logistics have all beavered away relying on infrequent cross-discipline get-togethers to ensure the left hand knew what the right hand was doing.

Programme management decided the time was right for everyone to get together and share the 2012/13 workstream plans to maximise the 4C's: co-ordination, communication, collaboration and co-operation.

The formal sessions provided a platform for workstreams to outline the issues they were confronting, notable achievements, and how they were challenging themselves and others in the programme to achieve even more. This is particularly important as 2014 is the end date for this initial phase of understanding the kauri dieback threat and the programme management team are beginning to develop the 'Beyond 2014' proposal for Government.

However, as often happens it was the informal sessions over meals and breaks where much of the action took place. These opportunities to put faces to names (or email addresses), establish new alliances, untangle previous misunderstandings and generally share 'cunning plans' for the future were of enormous value for all attendees.

A common theme was that the 'wish list' of activity for this year continues to exceed the available money and people resource, so the 4C's are going to be really important.

Many thanks to Dale Stephens for facilitating and Lynn McIlveen for making it all happen (in her inimitable and indomitable style)!

The final word belongs to Programme Leadership Team member Matua Hori Parata who, when closing the hui, observed it was just the beginning and issued the wero (challenge) that these conversations must continue.

A picture is worth a thousand words

The programme's publicity material has been significantly overhauled based on what we've learned from international and local forest users.

Despite our best efforts, many people still do not know that kauri are actually dying (!!) and they see little reason to remove soil from footwear and equipment because of that.

To counter this we have introduced a new messaging campaign that uses a more emotive message **SAVE OUR KAURI FORESTS**. We also more clearly say that kauri are dying from kauri dieback disease and that the disease is spread by soil movement.

We have also adopted the striking visuals from the website that dramatically show a healthy tree and a dead tree. Consumer testing showed that this visual approach was far more effective in capturing attention and communicating the need to take action.

This imagery will be used on track signage and a concerted effort will be made to link the visual imagery with clear instructions on what to do – so we link the WHY you must act with the WHAT you must do messages.

We have strengthened our connection with the Māori creation story by weaving in the phrase established early on within our Tāngata Whenua Roopu – 'Kia Toitu He Kauri ' – which translates as "may the kauri endure".

As an acknowledgment that children can be fantastic advocates, we have developed a kid's activity sheet and a colouring-in sheet to add to our collateral. These are in use by the Kid's for Kauri programme and others. The new material is available from your Education and Behaviour Change team members – Ian Mitchell, Waitangi Wood (TWR), Amy Cameron and Nick Hirst (DOC), Jackie Grenfell (MPI), Katherine Mabbitt (NRC), Stacey Hill (AC), Stephen Ward (WRC) and Yvonne Rooney (BoPRC), or can be downloaded from our website.

PARTNERSHIPS
helping us spread the word

We now have even more help raising awareness of kauri dieback and encouraging kauri safe behaviours by forest users.

We're delighted to welcome **Coopers Creek Vineyard** into the whānau.

This distinguished, family-owned company is based close to the Waitakere Ranges and has been well aware of the dieback problem in recent times.

Motivated to help make a difference, they have offered the programme an innovative partnership to spread the word.

Their Lone Kauri brand (how apt !!) will carry the programme message on its label and our promotional material will feature at tastings and point of sale locations all around the upper North Island. Lone Kauri wine is also exported to Asia, which will help get us to our tourist market as well. Their sales representatives have been briefed on the disease and the programme but will point the public to the Keep Kauri Standing website for up-to-date information. We'll also be featuring on their website and updates will be posted in their Facebook and Twitter conversations. The vineyard hosts Sunday Jazz events during summer weekends with close to 300 people attending each time. All of these visitors will get the chance to see KauriKorner, a dedicated display area in the vineyard tasting rooms, as well as promotional material outside close to the action.

Relationship Manager, Ian Mitchell says, "Coopers Creek approached Stacey Hill at Auckland Council some time ago with this exciting opportunity to broaden our reach into communities. We were very mindful of being associated with an alcohol product, but after many discussions with Coopers Creek we were convinced they are a very passionate and responsible organisation. Wine is about moderate consumption and about good times with good friends. It's about conversations and connecting with people. We see this environment as perfect for raising awareness and understanding of kauri dieback."

Cheers Lone Kauri!

Front and back labels of the new Coopers Creek, LONE KAURI brand.

(l to r) John Palmer (Coopers Creek Vineyard), Ian Mitchell, Stacey Hill, Nick Farland, David Nicholas (Coopers Creek Vineyard) with display material for Coopers Creek KauriKorner.

Valuable minutes in *60 Minutes*

TV3's flag ship current affairs show ***60 Minutes*** ran an extensive feature on kauri dieback disease and the work of our programme on Sunday 14 October.

If you missed it it's on our website in the media section **http://www.kauridieback.co.nz/home/media/video-footage.aspx**

It was a wide ranging piece covering the devastating effects of the disease and the efforts to stop its spread. ***60 Minutes*** interviewed a number of scientists and people involved in the stopping the spread of the disease, including Dr Nick Waipara and John Beachman. Much of the material they researched was featured, but as can happen in the constrained TV world, some important pieces were left on the editing room floor (Ed – an old reference back to the days of film, rather than the digital world we live in now!)

We are grateful for what did appear, as the programme is watched by approximately 250,000 viewers each week – you just can't buy this type of publicity.

http://www.tv3.co.nz/Shows/60Minutes.aspx

In the Studio: John Tamihere leads discussion with (from left) Dan Ambler, Sandra Coney, Nick Waipara, Will Ngakuru and Ian Mitchell.

Think Tank on kauri gone to air

"An unidentified killer is infecting our Kauri trees. Is banning public access to forests a complete over reaction from a bunch of tree huggers or are we on the verge of a major environment disaster?" TV3 promo for *Think Tank*

Did you catch the show on **Sunday 24 June, 9.30am, TV3?** Don't worry, you can still view the programme on our website here **http://www.kauridieback.co.nz/home/media/video-footage/think-tank.aspx**

To recap, we were invited to appear on TV3's current affairs programme ***Think Tank.***

Hosted by John Tamihere, the show involves a panel discussion where guests are tasked with looking at topical issues and coming up with solutions.

The panel (described by TV3 as very smart people who really add depth of knowledge to the issues!) included the following Kauri Dieback Programme members: Dr Nick Waipara, Ian Mitchell, Will Ngakuru and Dan Ambler, as well as Sandra Coney, an Auckland Councillor.

The panellist's spent a lively half hour discussing the problem of kauri dieback, the value of kauri to our culture and brainstormed potential solutions.

Troublesome tracks and new stations

Recent studies have found the presence of kauri dieback within the Waitakere Ranges Regional Park is strongly correlated with the track network. Approximately 70 percent of all symptomatic trees in the Waitakere's are located within 50 metres of a track. Spores of kauri dieback have also been detected in the soil on tracks. These findings highlight tracks as major pathways for disease spread and emphasise the need to increase and improve hygiene measures for track users.

Track upgrades, re-routes, boardwalks and temporary track closures are effective management options in many cases. In addition, one of the most important tools to help prevent the spread of kauri dieback is the use of the boot cleaning stations. These stations have been strategically placed to either protect currently healthy stands of kauri or for visitors to clean their boots after leaving an area of disease. Visitors are encouraged to clean and spray their boots each time they pass one of these stations.

The spray bottles contain Trigene, a biodegradable disinfectant, that has been shown to kill kauri dieback spores. At present, compliance with these cleaning stations is disappointingly low with many track users ignoring the signs and stations, potentially spreading the disease as they go.

Research has found that one reason stations are being ignored is simply because they are difficult to use: standing on one leg while scrubbing and spraying the other, a motion which has been nicknamed 'The Kauri Dance' can be difficult for even the young and fit. To try to increase compliance, Auckland Council are in the process of trialling a range of new stations designed for ease of use and effective soil removal. These new options include a basic hedgehog brush and collecting pan design, the imported Aussie "Phyto-fighter" and an improved version of the original grate and barrel design. These new cleaning stations are installed in the Waitakere and Hunua Ranges and will be monitored to gather people's response.

If you have any comments or suggestions on boot cleaning station designs (new and old) or management on tracks please contact Lee Hill, Auckland Council 022 6513922. We welcome collaboration.

Protection for Hunua kauri

Auckland Council are stepping up kauri protection measures in the Hunua Ranges from 1 September.

The ranges have been categorised into five different zones (non-kauri, intensive kauri management, kauri protection zone, buffer zone, forestry) to manage the risk of kauri dieback being introduced.

At this point, no areas of kauri dieback disease have been found in the Hunua Ranges, however, it is common in some areas of Auckland and Northland.

Council staff will be implementing intensive phytosanitary measures, track re-routes, track upgrades and some track closures to protect dense areas of kauri considered at risk.

Track closures will include Mangatangi Trig Track (East), Tapapakanga Stream Track and Colonel Sanders Track with some restrictions in other areas. These will be monitored regularly and reviewed in 12 months time.

One of the most important tools to help prevent the spread of kauri dieback is the use of boot cleaning stations. Pictured right is one of a new range of stations designed for ease of use and effective soil removal.

Kauri protection zones aim to protect healthy trees

From July this year, kauri protection zones in the Waitakere Ranges Regional Park in Auckland have been put in place to protect healthy kauri trees.

Kauri dieback disease is widespread in the Waitakere Ranges, but there are pockets of health with apparently unaffected trees. The Auckland Council is closing some tracks in these areas to form protection zones and keep these areas free of the soil-borne disease.

"This is a precautionary approach," says Richard Hollier, Auckland Council's Manager Regional Parks Operations.

"It is an attempt to control the spread of this disease that is devastating the giants of our forests and threatening the entire future of kauri, while still allowing for people's enjoyment of the ranges and its tracks.

"We are also investigating steps to take a similar approach in the near future in the Hunua Ranges Regional Park, which is so far disease-free" he says.

Protection zones in the Cascade Kauri, Anawhata, Waiatarua, Piha, Karekare, Huia and Parau areas have been identified. Sections of tracks within these zones, totalling 27 km of the track network, will be closed and reviewed in 12 months to assess the effectiveness of this management approach.

Kauri Dieback zone, Maungaroa Ridge, Waitakere Ranges.

NEWSFLASH

SCIENCE CORNER

This edition of ***KauriKonnect*** is skewed towards the many recent examples of publicity and community action activity. These are all important components of raising awareness and encouraging kauri-safe behaviours in our forests.

However, we are very aware that many of you want to be kept up to speed with the science programme as well. So, in the next edition we will introduce SCIENCE CORNER. It'll be a place where we will provide details of what we have learned and what we're doing to learn more.

Significant advances have been made in relatively short time, but unlike many other biosecurity threats where there was a body of knowledge to draw on, the programme started with from scratch working to manage not only an 'unwanted organism' but also an 'unknown organism'. It's been a huge challenge to understand and scientifically prove even some of the most basic things we need to do to identify and manage this particularly virulent threat.

"Kids for Kauri" programme

Kids for Kauri kicked off at Henderson Primary School in July with speeches, a performance by the whole school, and the ceremonial planting of kauri seedlings. The Kids for Kauri programme is run by the Community Waitakere Charitable Trust. The pilot run has been trialled in five primary schools throughout West Auckland. The programme is underway with support from the Kauri Dieback Management Programme and Treescape.

Kids for Kauri educators work with students to plant a kauri grove in each participating school, and teach students to protect their kauri with simple measures – such as cleaning shoes before and after visiting kauri.

Simon Grant from the Community Waitakere Charitable Trust describes the Kids for Kauri programme as, "a practical way for our youngest people to save our oldest tree."

We look forward to seeing kauri come back into our urban environments.

See the official press release for more information: **http://www.kauridieback.co.nz/media/19565/kids%20for%20kauri.pdf**

Henderson Primary School students caring for one of the Kids for Kauri seedlings while another student cleans the mud off a fellow student's shoes to prevent contamination.

We're getting out there

We have had a really interesting and heartening message come through the website. A *KauriKonnect* subscriber from Germany has contacted us to let us know that he is running a speaking blog: **www.nz2go.de** on New Zealand issues and we were recently featured.

Check out this page on his website **http://www.nz2go.de/kauri-dieback-wenn-muecken-elefanten-fallen/2587/** telling potential German visitors to New Zealand about kauri dieback and how to avoid the spread. Looks impressive – just wish we could read German.

Getting our message across to visitors before they arrive on our shores is very helpful. It means they have been "warmed up" (in their own language).

When they arrive and see our signs and messaging in New Zealand, they will resonate with them and have greater impact.

Delivering rurally

Dr Nick Waipara just keeps popping up all over the media. Nick was on TV1's *Rural Delivery Show*, on Saturday 9 June, at 9.00am where he discussed how the rural community can protect kauri from kauri dieback disease. After a quick discussion on what the disease is and where it came from, the show focused on what private landowners with patches of kauri can do to stop the disease coming onto their land, and what to do if they notice sick kauri.

Tāne Mahuta

In June, Radio New Zealand's *Te Ahi Kaa programme* broadcast a piece on Maraea Rakuraku visiting the great kauri tree, Tāne Mahuta at Waipoua Forest. We were represented by Te Roroa Kaumātua, Daniel Ambler as he outlined the current threats to the forest.

http://www.radionz.co.nz/audio/remote-player?id=2521354

Sight the blight site plight flight

The second batch of aerial surveillance is under way. Our Planning & Intelligence team suggested that the aerial team fly over the Great Barrier Island to test the fixed wing flight protocol. If you think this sounds fun and involves a rigid 'grid' pattern of straight lines then think again – check out the spaghetti pathway that they mapped below. We look forward to the results of this important advance in the science programme.

Hold the bus!

Eye-catching bus shelter posters were in place to raise awareness about kauri dieback disease during August. They will be repeated during November abd December.

The five bus shelters around Auckland, ranging from Albany to Mangere and out to West Auckland, were adorned with the new **SAVE OUR KAURI FOREST** posters. "Using bus shelter ads is a great way to spread the word to the general public who may not visit forest very often, but are still a very important audience," says Stacey Hill, Kauri Dieback Liaison Officer at Auckland Council.

Kaitiaki Konnecting

Meet the budding kauri scientists at Okaihau College

Earlier this year Ian Mitchell, our Relationship Manager, paid a visit to the year eight class at Okaihau College, Northland. The purpose of his visit was to give the children more information on kauri dieback before their class trip to Puketi Forest, which was coordinated with Helen Ough Dealy, Community Relations Ranger, Department of Conservation.

Ian was very impressed with the efforts the school had gone to in advance of his visit to prepare the children. He recalls his visit below.

"I was amazed at their openness to learning about the kauri and the kauri dieback disease. Their level of interest and motivation showed that the children already feel a strong connection and personal relationship with Puketi Forest and their taonga, the kauri.

"They wanted to demonstrate their background knowledge (every time I asked a question, about 10 hands went up), they wanted to learn more (the questions kept coming) and they were engaged in trying to find solutions to a problem they obviously feel strongly about.

"I was very impressed with the level of thinking and problem solving these children were demonstrating, an example being "Perhaps we can take the sap from a healthy tree and inject it into the sick tree and make it better", and other interesting and novel approaches to curing the disease. Equally, they were keen to go home and educate their family and friends about the problem.

"My only disappointment was that we ran out of time too quickly! I think these young people have already become important ambassadors for the Kauri Dieback Programme. I can see they will be ensuring their friends and whanau undertake correct practices coming in and out of kauri forests in the area. Heaven help those not keeping their shoes clean and sticking to the tracks!"

Here are some examples of the work the students produced after the visit. These formed part of the English assessment. In the next edition we'll run the equally great work done by Georgia Tilly, Emma Hunter, Kyla Moffat and Olivia Walden.

Eliminate Kauri Killer!

Aroha King-Puru

Thursday, March 16th was a day that Okaihau College's Year 8 class would never, ever forget. As each student eagerly ventured deep into the Puketi Forest learning many in-depth facts about the many trees such as the Mingimingi, the twenty-four students were also learning about the New Zealand Icon's biggest threat.

As you may know by now our country's beloved icon, the kauri tree, is dying due to a disease named Phytophthora Taxon Agathis – better known as Kauri Dieback Disease. Unfortunately, there is no known cure for this disastrous disease, but thankfully scientists are working on this, and they have found ways to help stop the spread of this harmful kauri killer.

Although this gruesome infection was first discovered in the 1970's on Great Barrier Island, many Kiwis have come to the conclusion that we can't just "leave the ones who are already dying to rot and mainly focus on the healthy ones" but, instead we can be heroic citizens and help every healthy kauri tree in New Zealand by following three simple rules:

1. Every time you wish to go to a kauri forest, ALWAYS make sure that your walking shoes are well rid of any dirt. Please, scrub your shoes with a scrubbing brush, and wash them with the hose at your house.
2. If you own farmland and there are kauri trees on your land, please fence off your kauri from domestic animals.
3. If ever you or your friends and family want to take a picture beside any kauri, don't EVER stand right beside the tree! The reason why is so you don't step on the feeding roots of the kauri. You can easily damage the tree roots by doing this.

The effects of this horrible disease are far too gruesome for any Kiwi to read - even writing about it is saddening. One effect is that when a mature kauri tree has this disease, it may "bleed" kauri gum near the base of the tree, which sounds unappealing. Trust this truthful reporter - it might look gruesome to us, but to the majestic kauri, it could be deadly.

In conclusion, please do not stand anywhere near the kauri tree roots or climb on them. Keep our kauri standing!

Kauri Killer

Tiana Edwards

A beloved New Zealand icon is in danger. Nestled in the North Island are many of the spectacular natural stands of kauri forests. But, because of one deadly disease that only affects our magnificent kauri, we are at risk of losing our New Zealand icon forever.

The mortal illness known as Kauri Dieback Disease is now confirmed in seven of our amazing Northland forests. You may be wondering why this disease is so deadly. It infects the delicate feeder roots and the tree may start to constantly bleed gum around the base of the trunk. It can infect and kill kauri of all ages, from seedlings to large trees.

But many people have little knowledge about how to help save our kauri.

Kauri trees are the "big softies" of the astonishing plant world. Although they can live for thousands of years in their natural environment, they are extremely sensitive to stress. The roots are very fragile and normally lay close to the surface of the ground. This means before entering a kauri forest clean your shoes thoroughly! Don't step off the track, as the disease is spread through soil. Farmers, if you have a kauri on your land, fence around them immediately. Having cattle tramp over the tree's roots can kill a kauri tree and spread the disease.

Like any native forest plant, individual kauri are part of a larger ecosystem. The Department of Conversation, amongst others, are trying extremely hard to keep our kauri thriving. Kauri is a big part of our national identity. Be a part of the path to recovery for kauri, and keep our New Zealand symbol from becoming extinct.

Boot cleaning station in use.

Kauri Population At Risk

Te Aroha Christmann-Williams

Many Northland farmers are proud to own segments of native bush. These same farmers are particularly proud if amongst the trees on their land they are fortunate enough to possess the majestic kauri. Many of these farmers perform seemingly innocent actions that could lead to the spread of Kauri Dieback Disease.

Kauri Dieback Disease was first discovered on Great Barrier Island. Kauri Dieback is an infectious, microscopic organism (a fungus-like species) which specifically affects kauri. This disease can be distributed when the healthy roots of a kauri are tread on.

Once a kauri tree is affected by this disease, its life span is shortened. Young saplings tend to decline in health much more swiftly than mature trees; the older trees are generally able to withstand the disease for an extended period.

There are many ways that this disease can be prevented. With the help of these simple guidelines, kauri will have an advancing and healthy future.

Kauri Guidelines (How To Care for Kauri):

» Keep off of the feeding roots of the kauri.

» Fence off kauri - but keep in mind that the tree will develop in growth.

» Keep stock away from the feeding roots of kauri, since root compaction causes kauri harm. Try to keep stock in a separate paddock to graze.

» Prevent soil movement by cleaning your footwear with a disinfectant called Trigene solution. Even simple soapy water will do to clean all the soil off your shoes.

Unfortunately there is no known cure yet but the above guidelines will make an immense difference to kauri.

To find out more information, go to www.kauridieback.co.nz or ring 0800 NZKAURI (695-2874)

Dieback Does Damage

John Cooper

Do you know about Kauri Dieback Disease? It is a soil-borne disease killing off our native giants, kauri trees. They are dying to a microscopic disease called Phytophthora Taxon Agathis or PTA. Phytophthora is a Greek word meaning "Plant Destroyer". This disease was first discovered in the 1970's on the Great Barrier Island. So far, there is no known cure.

How to spot it: Gum bleeding at the base of the trunk may indicate Kauri Dieback disease. Kauri Dieback disease is associated with collar rot causing bleeding lesions at the base of the trunk, yellowing foliage and ultimately, tree death. Kauri Dieback disease is highly pathogenic to kauri, and it can infect and kill kauri of all ages from seedlings to large trees. This disease is specific to kauri in New Zealand. No other native or introduced tree is known to be affected.

How to prevent kauri dieback: Kauri Dieback disease spreads by disturbances in the soil, and it is commonly spread by humans and animals such as cows, wild pigs, and dogs. Before visiting and after visiting kauri forests or kauri trees, it is necessary to wash shoes, tyres, and equipment to prevent the tree catching this disease. Kauri trees on farms will benefit from being fenced off from animals.

How to help: Kauri trees are the "big softies" of the plant world. Although they can live for thousands of years in their natural environment, they are sensitive to stress. Therefore stay on the track and off kauri roots, clean your footwear and equipment before and after visiting kauri forests. For a kauri to be healthy, it needs a healthy root zone, nutrients, water, shelter, sunlight, and room to grow. Kauri are an icon to New Zealand, and if we keep mistreating them, we will lose our glorious giants, the kauri, forever.

For more information, go to www.kauridieback.co.nz or ring 0800 695 2874.

Coming and going

Good news. Two members, Ian Mitchell, our Relationship Manager who leads the Engagement and Behaviour Change workstream, and Lynn McILveen our Logistics workstream lead, have both had their contracts confirmed for two years.

Lynn McILveen

Lynn has worked on the Kauri Dieback Programme for a year and a half. She describes her role as leading the Logistics team, managing contracts, budgeting and forecasting – so June and July is crunch time for her.

As Lynn's name and accent suggests, she originally hails from the fair isle of Scotland and Glasgow in particular.
A holiday to New Zealand led to a permanent move and Lynn and her Egyptian husband now live in Plimmerton, a small beach suburb on the Kapiti Coast near Wellington.

Lynn describes her career history as going from, "hugging children to hugging trees." She spent five years working for Child, Youth and Family and then a further five years with Family and Community Services in project coordination and communications.

Next up was a year in Dubai and working as an event planner, including organising one particularly memorable 'girls night' for the wife of one of Abu Dhabi's princes, "It turned out to be a party for 600 women and there was an unlimited budget and imagination."

Lynn's eyes glaze over and her voice becomes wistful, "I really miss that. Event and party planning in the Arabian desert – with no budget restraints."
Lynn presents a very calm, collected work persona. Perhaps the secret to her composure is having an outlet for her frustrations. "I play the drums in a Samba percussion group and used to be a playing member of the New Zealand Police Pipe Band. It was great because the world championships are held in Glasgow so I had the bonus of going home and seeing the family from time to time."

Back to New Zealand and year-end-finances and Lynn is excited that her position has been confirmed.

"I think it will really help having the consistency and continuity, and it means we can really plan properly, get the information we need for the budgeting, and hopefully this will help things run smoothly".

Jackie Grenfell

Jackie Grenfell is our new communications contact from the Ministry for Primary Industries and has joined the E&BC workstream.

"I've worked on range of topics (emissions trading scheme, climate change, droughts) but this is my first foray into the biosecurity area for MPI.

"But I feel like I've come home. One of my first communications roles was working at the Wellington Regional Council (a few years ago now) where I cut my teeth on 1080, pest plant campaigns and lots of writing about how to kill rats, stoats and magpies!

"Working at MPI is similar in that it allows me to remain involved with conservation and science issues, which are important to me. Back in my uni days I had visions of doing good deeds for DOC so I trained in ecology and zoology and went on to do a Masters in Conservation Science.

"Then I packed my bags and went on the big O.E. and ended-up temping in London at a financial services firm for wealthy Jewish South Africans. It was certainly a change in direction, but got me into marketing and communications.

"I retrained and I've now been working in communications and marketing for around 14 years, eight of them spent in London. During my time there, I managed social marketing campaigns to get UK sickness beneficiaries back into work and then ran the communications research programme for the UK's Department of Health.

"I moved back to my home town of Wellington in 2008 and my husband and I bought a house five minutes away from my parents (which I swore I'd never do) and had our two children, Benjamin (3½) and Annabelle (1½). As for hobbies....hmm many nights spent at home means I'm hooked on Game of Thrones."

Correction to "Where in the wood is PTA?"

We made a mistake. In last issue we highlighted the excellent work of Monique Woods, but we got Monique's email address wrong. Monique Wheat is undertaking a research project and needs access to felled kauri that is affected by kauri dieback. Can you help? If so email her on: **Monique.wheat@aucklandcouncil.govt.nz**

To recap, Monique's research aims to determine where in kauri wood PTA can be found. The research has three main aspects.

Firstly, how far up a kauri can PTA be found – is it in the upper trunk, in the canopy branches, leaves seeds or cones?

Secondly, how far in kauri wood can PTA be found – is PTA just below the bark (see illustration ***KK issue 21***), can PTA be found in the sapwood or even the heart wood?

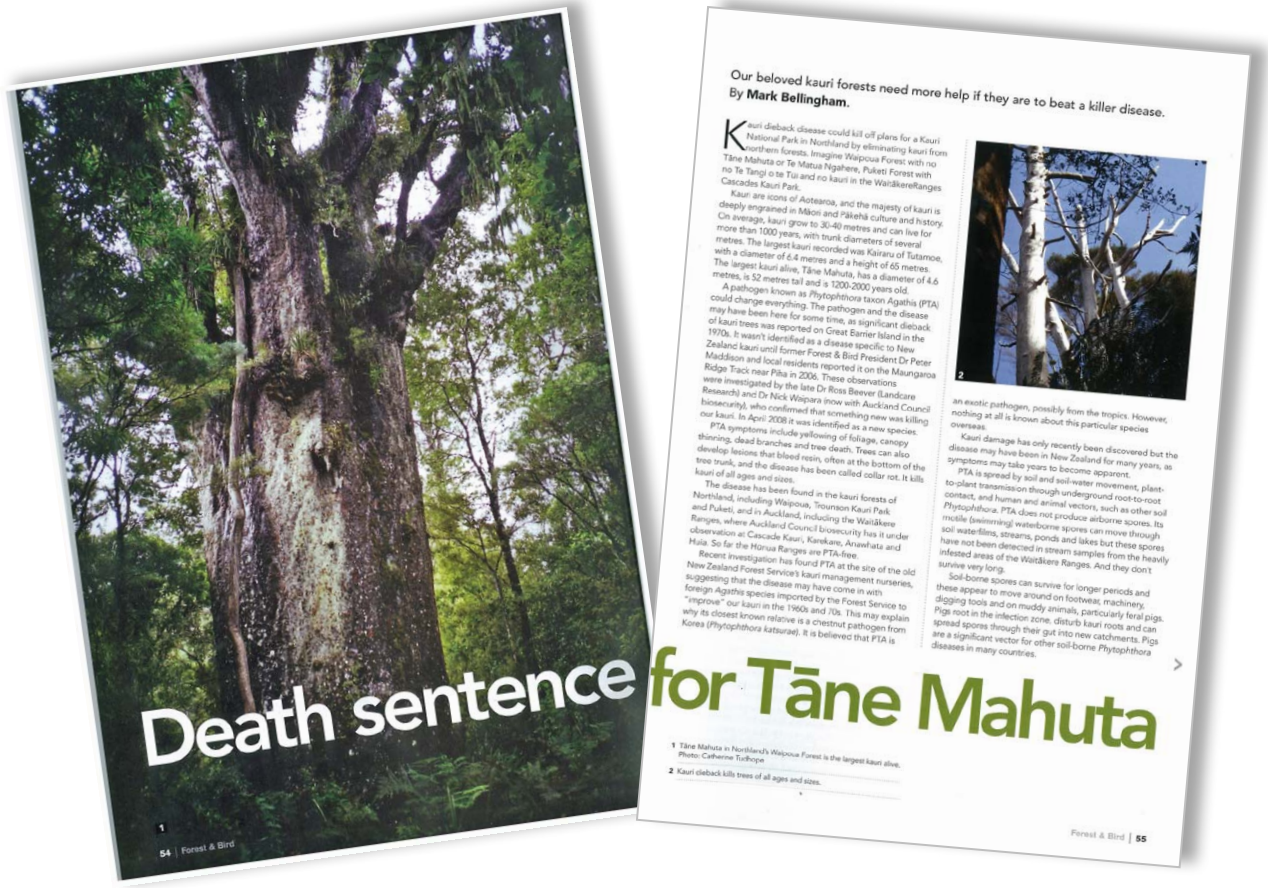
The third aspect of the research is to provide guidance to policy makers to help determine the best hygiene methods to limit the spread of kauri dieback, including from pruning and tree removal procedures.

More publicity for the cause

Mark Bellingham's article in a recent issue of *Forest & Bird magazine* adds to the swell of publicity for our programme. With the headline "Death Sentence for Tāne Mahuta" next to a glorious full-page colour photo, this emotive article will have certainly grabbed the attention of Forest & Bird readers.

And they are very important potential advocates for our programme. There are 70,000 Forest & Bird members and supporters who describe themselves as "New Zealanders who love nature – planters, weed-busters, educators, pest controllers, environmental lobbyists and climate change activists."

The Kauri Dieback Management Programme is grateful for the publicity and the continued support that we receive from Forest & Bird and its membership.



The story so far...

Our treasured taonga is under threat from kauri dieback disease. It has already killed thousands of kauri trees and will spread further unless all forest users take action.

New Zealanders see kauri as playing a huge part of who we are. Its status derives from its mythical origins and present day importance to our biodiversity, eco-tourism economics and our innate sense of what New Zealand is all about. Kauri contributes to our national identity, spiritual wellbeing, economic prosperity from tourism and our overall biodiversity and interconnected forest ecosystems.

Kauri dieback disease has emerged as a major threat, some would say the most catastrophic biosecurity threat of recent time.

Kauri dieback is a fungus-like disease specific to New Zealand kauri and can kill trees of all ages. Microscopic spores in the soil infect kauri roots and damage the tissues that carry nutrients within the tree. 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. It is believed to have been introduced from overseas.

The disease produces both a soil-borne 'oospore' and water-borne 'zoospore' that can move on its own. Both spores can infect kauri roots.

Spores of kauri dieback were first discovered along with sick kauri on Great Barrier Island in the 1970's.

Identification methods at the time led to these samples being misclassified. Kauri dieback was formally identified in April 2008 as *Phytophthora* taxon *Agathis* (or PTA).

Phytophthoras are commonly known as "water moulds" and comprise some of the most destructive plant diseases known to man. The Greek word literally means 'plant destroyer.'

Unfortunately these destructive Phytophthora diseases have been unwittingly introduced to many native forests throughout the world where they are not only killing millions of canopy trees but also whole ecosystems that rely on the trees.

Unfortunately kauri has joined this list and kauri dieback disease has killed trees in the Waitakere Ranges, on private land throughout the Auckland region, in the forest plantations of Omahuta, Glenbervie and Russell in Northland, Department of Conservation reserves at Okura, Albany, Pakiri, Great Barrier Island, Trounson Kauri Park and the Waipoua Forest in Northland, home of our most iconic kauri - Tāne Mahuta.

There are pockets of health and resistance too, however.

At this stage, the disease has not been detected in many areas of Northland forest, the Hunua Ranges, Hauraki Gulf Islands (excluding Great Barrier) and bush in the Coromandel Peninsula. It's imperative that we protect these unaffected areas.

Since 2009, 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.

The other programme partner is tāngata whenua. Since first learning of kauri dieback, tāngata whenua throughout the kauri catchment have been 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.

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. Trials involving the use of phosphite to treat the disease have shown promising lab results and field tests have begun.

Work is also going into improving track construction, drainage and other man-made influences that will help reduce the spread of the disease.

The story so far continued

There have also been trial closures of tracks in some parks, or re-routing tracks away from kauri.

The programme has 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.

The key message being driven home is to stop the spread of the disease:

» Make sure shoes, tyres and equipment are cleaned to remove all visible soil and plant material – before AND after visiting kauri forest

» Stay on the track and off kauri roots

These messages have come from the understanding that spores of kauri dieback are found in the soil around affected kauri. Any movement of infected soil can spread the disease. Human activity involving soil movement (on footwear, machinery or equipment) is thought to be the greatest cause of spread.

We all can help - tourists, hunters, trappers, trampers, runners, bikers, walkers. We all need to make it happen, rather than hope 'someone else' will do it.

So, to spread the word rather than the disease, you can access more information at the programme's website – **www.kauridieback.co.nz**.

If you think your trees have symptoms of kauri dieback call **0800 NZ KAURI (695 2874).**

SHARE THE NEWS. Got a story to share on kauri dieback? Spread the word in *KauriKonnect*.

Contact nick.farland@paradise.net.nz to pass on any news, updates or articles and photos.

If we all contribute we'll make this newsletter even more relevant and interesting!