KAURI DIEBACK PROGRAMME

Annual Operating Report for the 2015/16 Financial Year

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

Disclaimer

The information in this publication represents the collective view of the Kauri Dieback Programme. While every effort has been made to ensure the information in this publication is accurate, the Kauri Dieback Programme does not accept any responsibility or liability for error of fact, omission, interpretation or opinion that may be present nor for the consequences of any decisions based on this information. Any view or opinion expressed does not necessarily represent the individual views of any of the members of the Kauri Dieback Programme.

ISBN: 978-1-77665-462-8 (online)

ISBN: 978-1-77665-463-5 (print)

Contents

Introduction

Kauri are a much-loved tree species and have a special place in New Zealand's northern ecosystems and history. Kauri help shape the character and function of forests where they occur, they are a taonga tuku iho of the Māori ancestral spiritual world and are of significant cultural importance to all New Zealanders.

But all is not well with kauri. Historical commercial harvesting and land clearance has left us with a small fraction of the formerly widespread kauri forests, and now all kauri are under threat from a disease that kills most if not all the trees it infects.

Kauri dieback is caused by a fungus-like pathogen called *Phytophthora agathidicida*. Although we think it's been killing kauri since the 1950s, it was only in 2009 that scientists were able to identify the pathogen and its role in causing kauri dieback.

The pathogen kills kauri of all sizes, from the smallest seedlings to the mightiest of forest giants. There is no evidence of any natural resistance to the disease, which means that, in time, practically all kauri could succumb to it.

After the disease was recognised, it became obvious that resources, expertise and decision-making would have to be shared if kauri were to be saved from the disease and that the community was crucial to that happening.

Therefore, the Kauri Dieback Programme was formed in 2009, bringing together tangata whenua from areas with naturally occurring kauri, the Ministry for Primary Industries, the Department of Conservation, Auckland Council and the Northland, Waikato and Bay of Plenty Regional Councils.

Since 2014, when the Kauri Dieback Management Programme's 10-year strategy was developed, the Programme has focused on four main areas of work.

- Delivering effective operations: ensuring that resources are targeted at the right scale (whether that be whole landscapes, forests or stands) to the right sites (regardless of whether they are privately or publicly owned) and that the most effective mix of interventions is utilised (given the local context).
- Building knowledge and tools: to make us all more effective and efficient at managing the disease and its impacts.
- Engaging and enabling people and communities: central and local government can't manage the disease alone – whole communities need to part of preventing the spread of kauri dieback.
- Effectively managing the Programme: maintaining a culture focused on continual improvement and collaboration.

By delivering on this strategy we expect to have:

- a continuous improvement in our understanding of the disease and how it can be managed;
- widespread engagement and involvement of mana whenua, communities, industry and the general public in the management of the disease;
- significantly reduced disease spread rates.

The 2015/16 financial year saw some important milestones being met on the road to delivering on all of these goals, which you can read about in the following pages. There's also a brief summary of the progress the Department of Conservation has made in its project to reduce the spread of kauri dieback by upgrading its visitor facilities.

It should be acknowledged that there are still some significant challenges to be overcome, but I am confident that the work done to this point has left the Kauri Dieback Programme – as well as the key communities of the upper North Island, who are crucial to stopping the spread of the disease – well positioned to keep kauri standing, both for current generations and for those still to come.

Ngā mihi

Erik van Eyndhoven
Past Governance Group Chair

Effectively Managing the Programme

The Programme management objectives, as set out in the Programme's strategy, are for the lifting of standards and continual improvement, improving co-ordination across the Programme and with other parties and monitoring the Programme's progress. A fourth goal – to explore alternative structures for the Programme – is something that we hope to undertake soon.

The process of transitioning the Programme from a response-type operating approach to a long-term joint disease management model was completed during the course of the 2015/16 financial year.

This required a review of the strategic direction of all the workstreams and putting in place changes that will better serve the Programme's long-term goals.

Examples of this, broken down by workstream, included the following:

- The Operations workstream adopting a pan-regional approach to proactive disease surveillance.
- The Planning and Intelligence workstream commissioning a review of the Programme's current state of knowledge. Any gaps identified will be rectified in the 2016/17 financial year (more details are in the Building Knowledge and Tools section).
- The work of the Programme's Engagement and Behaviour Change group was aligned with the principles of behaviour change. As a result, many of the Programme's communications tactics (including its use of online and social media, its collateral and its messaging) has been or is being modified.
- The Programme's relationships work is being refocused so that it works at more of a pan-regional level.

Improvements have been made across the board in terms of monitoring and reporting on the progress of the Programme's work; improving co-ordination across the Programme, including with the Tangata Whenua Roopu; and ensuring that the Programme's work is always aligned with both its guiding strategy and its annual operating plan.

Towards the end of the year, the Ministers for Primary Industries and Conservation asked the partners to provide more senior representatives for the Programme's Governance Board, to ensure that kauri dieback policies are fully adopted across all agency partners. Subsequently, the Ministry for Primary Industries' Chief Operations Officer and the Department of Conservation's Deputy-Director General of Operations both joined the Board.

During the 2015/16 financial year, significant changes were also made to the way the Programme procures services, including research. There are now policies in place that cover all forms of procurement, along with improved performance measures.

An information management strategy was written that will ensure document control is applied across the significant range of documents the Programme produces each year.

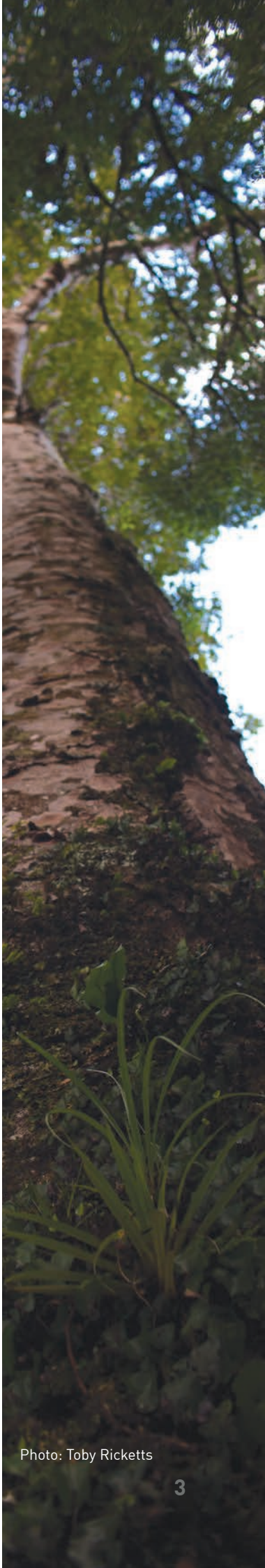


Photo: Toby Ricketts

Delivering Effective Operations

The work of the Programme's Operations workstream, as described in the Programme's strategy document, is focused on targeting resources to the right scale for the problem we are trying to solve, targeting our resources to the highest priority sites, deciding on the most effective mix of interventions to suit a variety of sites and ensuring that interventions on private land, including Māori-owned land, are prioritised and that landowners are educated, supported and empowered. In the 2015/16 financial year, this translated into the work described below.

Photos: Zoe Lyle

Improving infrastructure

The Programme's disease surveillance work partly informs when and where cleaning stations and track upgrades should be installed/made first, in order to reduce the risk of the disease spreading. Humans are the most important disease vector. Experience shows, for instance, that mitigating against muddy sections of track greatly reduces the chances of the disease being spread through a track network.

'Barrel and grate' cleaning stations were installed at the AH Reed Memorial Park and the Mount Parihaka Scenic Reserve near Whangārei, on DOC-managed land in and around Kerikeri, Kaitaia and on the Kauri Coast (between Dargaville and the Hokianga).

In the Auckland Region, stations were installed in the Tui Glen, Kauri Glen, Le Roys Bush and Onetangi Reserves and Te Matuku to Awaawaroa Walkway.

Barrel and grate cleaning stations were installed on the Coromandel Peninsula at Long Bay Reserve, Twin Kauri Reserve and several other DOC-managed sites.

In addition, significant amounts of work went into upgrading visitor facilities on DOC-managed land in order to reduce the risk of spreading kauri dieback, under the auspices of DOC's Recreation Project (see page 6).

Protecting kauri on private land

The criteria for determining priority forests and sites under this project and the criteria for allocating grants were developed early on in the 2015/16 financial year, with the selection of different sites and the commencement of building work occurring throughout the year. The initiative involves partnering with landowners to protect or isolate important and/or infected stands of kauri.

The work is funded by grants from The Aotearoa Foundation and The Tindall Foundation.

Generally, the partnerships result in trees being fenced off, particularly from stock, which are a well-known vector for the disease. A kauri's delicate feeder roots can grow up to three times the distance between its trunk and the edge of its canopy, making it vital these areas are protected.

Other mitigation measures include carrying out pest control and facilitating the cleaning of visitors' and contractors' footwear and equipment.

The first year's fencing work contributed to the protection and containment of 117 hectares of kauri habitat across four different sites. Work began on another significant site during the year that, when complete, will isolate another 100 hectares of kauri forest in which the disease has recently been detected.

Landowners at all sites have been given kauri dieback cleaning supplies.

Developing technologies to better manage the disease

During the course of the 2015/16 financial year, a database was developed to record the results of all field inspections and lab results.

A software application was also created for site inspectors to use to record field data, take and upload photos of infected areas and so on. The app was made available the following year for partner agency staff to use in the field.

Work continued on a large-scale Web-based GIS mapping project. When completed, the software tool will allow users to overlay layers of information onto a map of the areas where kauri naturally occur. The map will then be able to be used to better understand where the disease has and has not been detected and the possible ways in which the disease could be spread.

Combined, these new technologies will give the Programme a far better ability to manage kauri dieback across all kaurilands.

The Department of Conservation's Kauri Dieback Recreation Project

As well as being a partner in the Kauri Dieback Programme, DOC has a major project under way to reduce the risk of visitors spreading kauri dieback by improving visitor facilities on the land DOC manages or co-manages.

During the 2015/16 financial year, DOC completed the assessment of all visitor facilities located in kauri forest on public conservation land. This involved inspecting 456 assets and 735 kilometres of tracks. Following the assessment, six contracts were let for work on 26 high-priority tracks.

In other work, a prototype cleaning station was designed for high-use sites. Four of the stations were built, installed and evaluated over the 2015/16 summer. The stations were extremely successful, with the number of people cleaning their gear in the stations averaging 97 percent. Feedback from operations staff is currently being used to improve the design.

The Waipoua Tactical Plan was also developed to reduce the risk of kauri dieback being spread in the Waipoua Kauri Dieback Management Area (defined as the rohe of the iwi Te Roroa). The partners in the plan are DOC, the Northland Regional Council and Te Roroa Mana Whenua Trust. Te Roroa have been contracted to implement the plan with funding from DOC and the Council.

DOC also provided funding to Te Roroa to employ kauri dieback ambassadors at Tāne Mahuta, the iconic kauri that attracts visitors from around the world to the Waipoua Forest. Two ambassadors were stationed at the entrance of the path to the tree over the summer, providing information on kauri dieback and ensuring that visitors had clean footwear. Ambassadors will continue to be posted at the site for a further two years.

A pig control programme was launched in the Waipoua Forest, aimed at reducing the numbers of the animals to levels at which no rooting beneath kauri is occurring, over an area of 7,000 hectares. The programme is continuing.

Building Knowledge and Tools

The Kauri Dieback Programme's Planning and Intelligence workstream is described in the Programme's strategy as being focused on sharing and aligning mātauranga Māori, accessing the best advice and guidance and prioritising knowledge gaps; improving our understanding of disease distribution; building or improving our tools for managing the disease; and better utilising regulatory tools. These goals were achieved during the 2015/16 financial year in part with the following tactical examples.

Decision-support tools

Kauri Mapping Project

This is an ongoing project to establish a geodatabase showing the locations of natural stands of kauri as well as information on abundance, composition, maturity and anthropogenic disturbance. An initial desktop review carried out for this project was completed in March 2016. Work on a draft geodatabase report is now under way. It is expected the project will be completed and available to all Programme partners by April 2018.

Iconic Tree Project

One of the outcomes of the Kauri Dieback Strategy is to protect iconic individual trees and stands from kauri dieback. To help us define the qualities that make a particular kauri 'iconic', a desktop research project was initiated. The results of this will be used as a basis for refining the current list of trees with iconic status.

Prioritisation and Optimisation Framework

During the course of the Programme partners' work, it became obvious that a tool was needed to aid in decision-making around the best ways to manage the risk of disease spread. This led to the creation of a decision-support tool through a series of workshops held to capture the partners' collective knowledge.

Knowledge Review

This independent review was commissioned to assess the Programme's current state of knowledge in terms of the kauri dieback-related research done to date. Topics included mātauranga Māori, the understanding of the disease and its distribution, tools for managing the disease and the Programme's understanding of the effectiveness of its management interventions. The resulting report identified both knowledge gaps and some well-resolved areas and made recommendations on future research directions that will be factored into the planning of future research.

Photo: Bert Bourgeois

Control and management tools

Possible alternative treatments

Work began on determining (through lab trials) the effectiveness of 10 commercially available agri-products to inhibit the growth and pathogenic effects of *Phytophthora agathidicida*.

Genetic research – Healthy Trees, Healthy Future

Healthy Trees, Healthy Future is a six-year research programme aimed at finding management tools for three different *Phytophthora* species. A major component of the programme is focused on discovering whether kauri have any genetic resistance to *Phytophthora agathidicida*. The 2015/16 financial year was the third year of the Healthy Trees, Healthy Future programme.

Phosphite projects

The chemical phosphite is used overseas and in New Zealand to slow the spread of *Phytophthora* on a wide range of plant species and to reduce the impacts of the pathogen. It is not a cure.

A number of phosphite research projects were initiated this year or carried over from previous years.

Phosphite barriers

This research was done to assess the feasibility of using phosphite as a barrier treatment to contain *Phytophthora agathidicida*.

Photo: Toby Ricketts

Photo: Zoe Lyle

Photo: Bert Bourgeois

Toxicity and impact

This sought to assess whether a number of environmental factors influenced the uptake of phosphite administered via trunk injections as well as any negative effects the injections have on the tree.

The first stage of the trial involves injecting water instead of phosphite. The results are expected by June 2017. These will indicate whether further trials – using phosphite instead of water – are required.

Twig assay refinement research

To determine when trees might benefit from another round of treatment. This research will be completed by June 2017.

Ongoing ricker injections

Trials aimed at determining the efficacy of phosphite trunk injections on slowing the onset of the disease in ricker (juvenile) trees. The trials were established in 2012 at four sites in Northland. Monitoring will continue until April 2017.

Large tree treatments

In a similar way to the ricker trials, the large tree phosphite trials were designed to establish the possible treatment rates for large trees and the effect those injections had on the trees' symptomology. Monitoring and assessment is ongoing at four sites in Trounson Kauri Park, at the Cascades (in the Waitākere Ranges) and near Kerikeri.

Trunk sprays and low injection rates

This research was commissioned to determine the efficacy of using phosphite as a more-readily applied trunk spray and also to investigate the effects of low injection rates on toxicity and efficacy.

Mātauranga Māori

Rongoā (traditional medicine practices) project

The purpose of the Project is to establish any mātauranga Māori rongoā that may be useful for either individual kauri or kauri ngahere mauri.

Photo: Toby Ricketts

Origins of the disease

Further research was commissioned to investigate where in the world *Phytophthora agathidicida* may have come from, if it did not originate in New Zealand. (Previous research has indicated that *Phytophthora agathidicida* may have originated from overseas.) The work involves testing soil samples taken from beneath trees in New Caledonia that are related to kauri and that were showing similar symptoms to kauri dieback. Testing is ongoing.

Photo: Toby Ricketts

Historic Pathways

This is an investigation into the possible role the activities of the former New Zealand Forest Service may have had in the introduction and spread of *Phytophthora agathidicida* in New Zealand. Several possible spread pathways were investigated, including kauri nurseries, kauri plantation and harvesting practices, and exotic forestry management. This work is ongoing.

Detection

Aerial disease surveillance

Establishing where the disease is and isn't will always be a priority for the Kauri Dieback Programme. During the 2015/16 financial year, surveillance flights were made over large parts of the Kaipara and Whangārei regions and over more targeted areas in the far north of the North Island. The Programme also funded the Waikato Regional Council to complete a major aerial surveillance programme in the northwestern parts of its region, a significant undertaking that incorporated 19 per cent of the greater Waikato's land area, including the areas between Onewhero and Kaihere, around Ngāruawāhia, Pirongia Forest Park, Te Kauri Park, and the Raglan coast to Kāwhia. The results will help inform the Programme's ongoing operational work in the region.

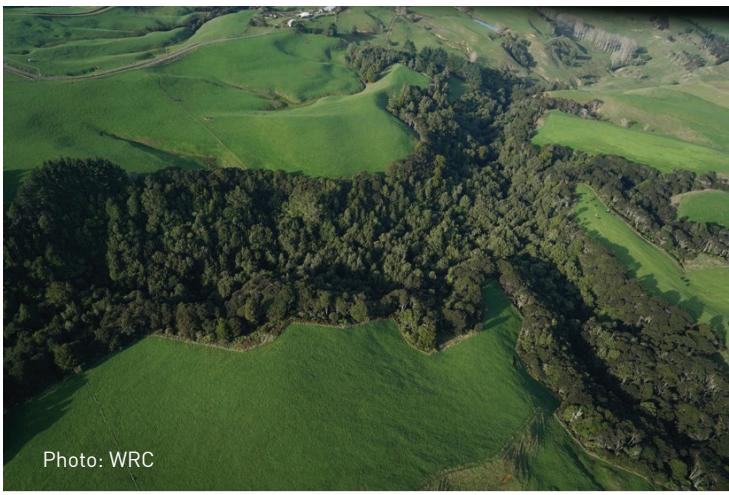


Photo: WRC

Ground-truthing

Sightings of possibly symptomatic trees are required to be followed up by soil sampling. This involves taking samples at eight points around a tree, coupled with analysis by at least one and usually two independent laboratories. A total of 67 sites were sampled in Northland and the Waikato alone. Overall, the sampling operations revealed 15 new infected sites in Northland. The sampling found no new detections of the disease in the Waikato/Coromandel regions.

A major ground-truthing operation in the Waitākere Ranges, began late in the financial year. While the final report was yet to be received at the time of going to print, it is expected that this will provide a significant improvement in the understanding of the distribution of the disease in the Waitākere Ranges Regional Park.

Remote sensing

This ongoing project is aimed at developing a method to identify kauri trees and establishing whether they may be infected or not on the basis of imagery captured by sensors on fixed-wing aircraft.

Detector dog research

This was aimed at establishing whether a dog could be trained to detect *Phytophthora agathidicida*. The results were promising, although further trials will be required.

Photos: Zoe Lyle

Engaging and Enabling People and Communities

By engaging and enabling larger numbers of people to understand kauri dieback and what actions they can take, we will access the passion, commitment, local knowledge and skills of the New Zealand public and tangata whenua in helping to keep kauri standing. This is defined by the Programme strategy as encouraging behaviour change, communicating consistently and proactively across the Programme and building long-term relationships.

Colmar Brunton Forest Users' Survey

In November, the Programme engaged research company Colmar Brunton to undertake a major survey of forest users' attitudes, knowledge and behaviour. The work was carried out in December 2015 and January 2016. The survey was designed to follow up on research carried out in 2011 and to deepen the Programme's understanding of its key audiences.

The research was carried out in two stages. The first was an online survey of 1,200 people living within the upper North Island. The second stage involved identifying key activities and beliefs from the first stage and then interviewing the forest users from those groups (such as those people who do not comply with cleaning protocols).

Colmar Brunton found that residents' awareness of kauri dieback had nearly doubled since 2011 and that two-thirds of residents knew about the disease. Eight out of 10 people from this group could correctly name at least one way in which kauri dieback is spread.

The survey will continue to inform the Programme's work over the next three years.

Retailing of SteriGENE

Work began during the year to have SteriGENE – the disinfectant that is an important part of the kauri dieback cleaning process – put on sale in retail outlets in the upper North Island. This is being done to allow commercial off-track users, landowners, school and tramping groups and so on to fully comply with cleaning protocols when no cleaning stations are available. Co-branded SteriGENE bottles with cleaning instructions are expected to begin appearing in stores during the third quarter of the 2016/17 financial year.

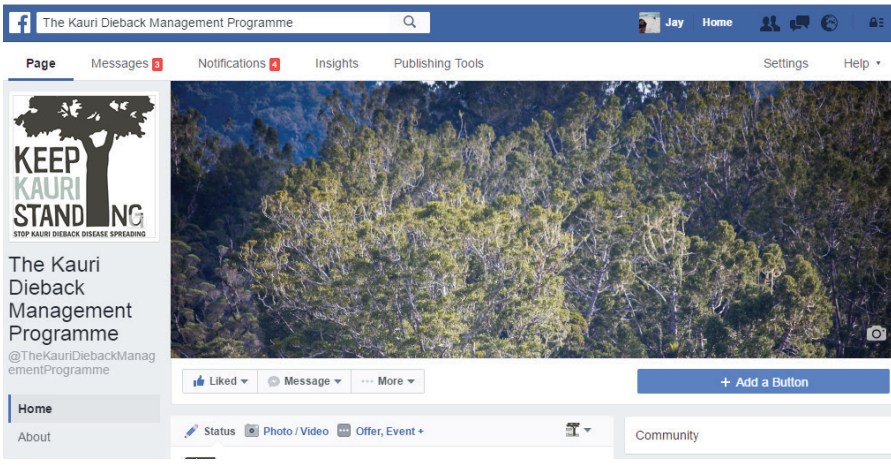
Name change – *Phytophthora* taxon *Agathis* to *Phytophthora agathidicida*

In December, the Programme's Governance Group formally adopted a new name for the pathogen that causes kauri dieback. The temporary taxonomic name for the pathogen – *Phytophthora* taxon *agathis* – has now been replaced by *Phytophthora agathidicida*.

The new name for the pathogen has been widely adopted.

Social media

The Programme maintains a Facebook page to support those who are willing to advocate for kauri compliance within their social networks. Over the course of the year, the number of people who had liked the Programme's page increased from 1,657 to 2,130. This increase has enabled the Programme to reach as many as 25,000 Facebook users from key target groups.



Website rebuild

The Programme's website (www.kauridieback.co.nz) was rebuilt in the second half of the year. The new site will streamline users' access to the compliance information that applies to their activities. The new site will be launched in the third quarter of the 2016/17 financial year.

Aligning the Programme's work with the principles of behaviour change

Throughout the year, the Programme's overall messaging, external and social media content, advertising, website content, signage and collateral were modified to better address the public's possible


Photo: Laura Goudie

motivations for and barriers to complying with kauri protocols. This process has continued into the new financial year (older signage will be used in the field for the lifetime of the product). An example of the new signage is below.

Track ambassadors

The Programme contracted the Coromandel Kauri Dieback Forum to provide a kauri dieback ambassador at a popular Coromandel walking track over the Christmas/New Year period. The ambassador engaged with over 400 groups of people over that time, modelling the correct cleaning technique and delivering key messaging on kauri dieback.

The Tindall Foundation and The Aotearoa Foundation Regional Support grants

Thanks to $60,000 worth of funding from The Tindall Foundation and The Aotearoa Foundation (who also supported the initiative to protect kauri growing on private land), four regional groups were contracted during the financial year to broaden the kauri dieback advocacy work they were already doing.

The Chinese Conservation Education Trust worked with visitors from China and Chinese New Zealanders to support their compliance when making recreational visits to kauri. This engagement was achieved by running bus tours, having stands at events and appearances in Chinese-language media. The Trust engaged with 940 people face to face on kauri dieback compliance.

- The NZ Landcare Trust used its funding to get kauri dieback compliance incorporated into its pest control guidelines and contracts and into the workshops it runs (such as its canine kiwi-aversion training courses).
- The Queen Elizabeth II National Trust also received a small grant, as well as training from Programme staff, to support the engagement of the owners of QEII-covenanted land in the Trust's Far North, Kaipara, Whangārei and Northwest Auckland districts.
- Te Rūnanga o Te Rarawa, whose rohe takes in the Warawara Forest in the Far North, engaged with pest trappers, hunters, school children and local farmers in hui, at A&P shows and at community events.

The Tindall Foundation and the Aotearoa Foundation have committed to the same level of funding for the 2016/17 and 2017/18 financial years.

Report from the Tangata Whenua Roopu for the 2015/16 financial year

The Tangata Whenua Roopu's role is to ensure the views of Māori are incorporated into the Kauri Dieback Programme's strategic decision-making, and its management of kauri dieback disease. The Roopu's membership consists of tangata whenua and some mana whenua whose land or rohe has naturally-occurring kauri. By maintaining links to Programme activity and information, the membership is able to inform mana/tangata whenua on how to prioritise their management of kauri dieback.

The 2015/2016 financial year was one of incremental change for the Roopu, during which the Roopu focused on remaining consistent with the Programme's Strategy document of 2014, as well as on progressing tangata whenua projects and mana whenua interests. These included incorporating mātauranga Maori into the Programme's work, and maintaining the development of kauri forest cultural health indicators.

During the course of the year the Roopu reviewed its representation on the Programme's workstreams. As a result, the roles of the Roopu's representatives on the Planning and Intelligence workstream and the Operations workstream were amalgamated. This allowed the two representatives to share workload, and pool their capacity to participate in workstream activities and projects.

In addition, a mātauranga Māori-specific role was created to also contribute to the Planning and Intelligence Workstream, so inform the workstream's activity aligning it with the mātauranga Māori goals found in the Kauri Dieback Programme's strategy document.

Other activities during the 2015/16 year included:

- Developing the relationship between mana whenua and the crown research agency Scion. This informs activity in the Healthy Trees Healthy Future project (see page 7) and Scion's engagement with mana whenua when carrying out field research, and helps ensure that mana whenua are engaged with the science within the Healthy Trees Healthy Future programme.
- Working with the Department of Conservation to facilitate the Department's engagement with mana whenua during the course of its Kauri Dieback Recreation Project (see page 6). The engagement includes supporting the implementation of cultural ecological systems for managing kauri, such as rahui, in those instances where there are plans to close tracks.

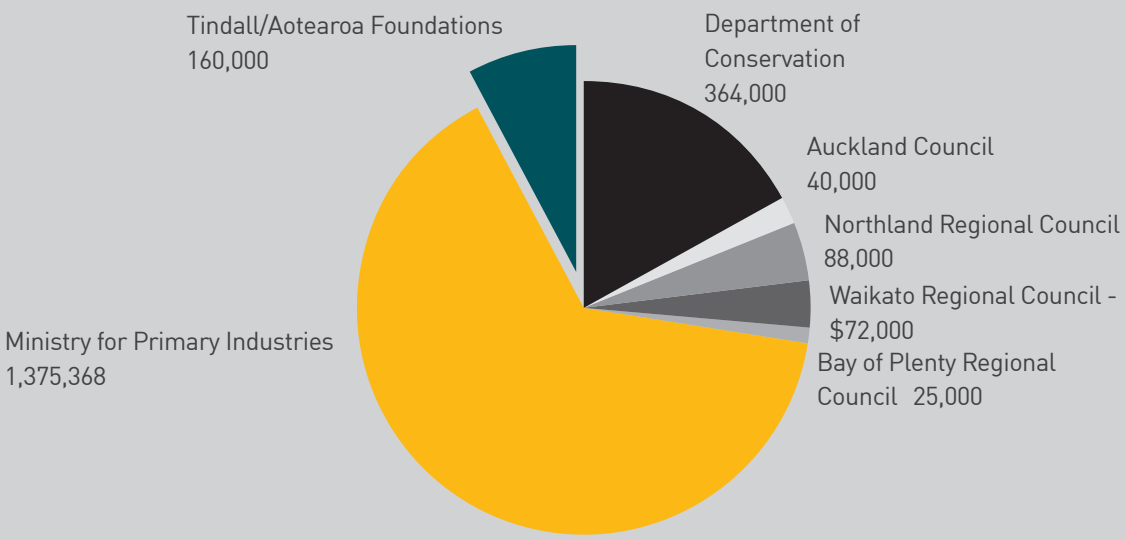
In closing, we would like to acknowledge those we have lost during the year, and also all those who supported the Tangata Whenua Roopu in being "engaged at every level of the Programme". We would also like to give particular acknowledgment to Matua Hori Parata for his dedication in supporting the work of the Roopu and the Kaiarotake (the Roopu's Executive).

We acknowledge that the 2016/17 year will be critical for kauri. The Roopu is hopeful that kauri will survive for the benefit of future generations; it is this hope that keeps our whanau and community committed to working with partners, and each other, to find a solution to kauri dieback and to saving our kauri.

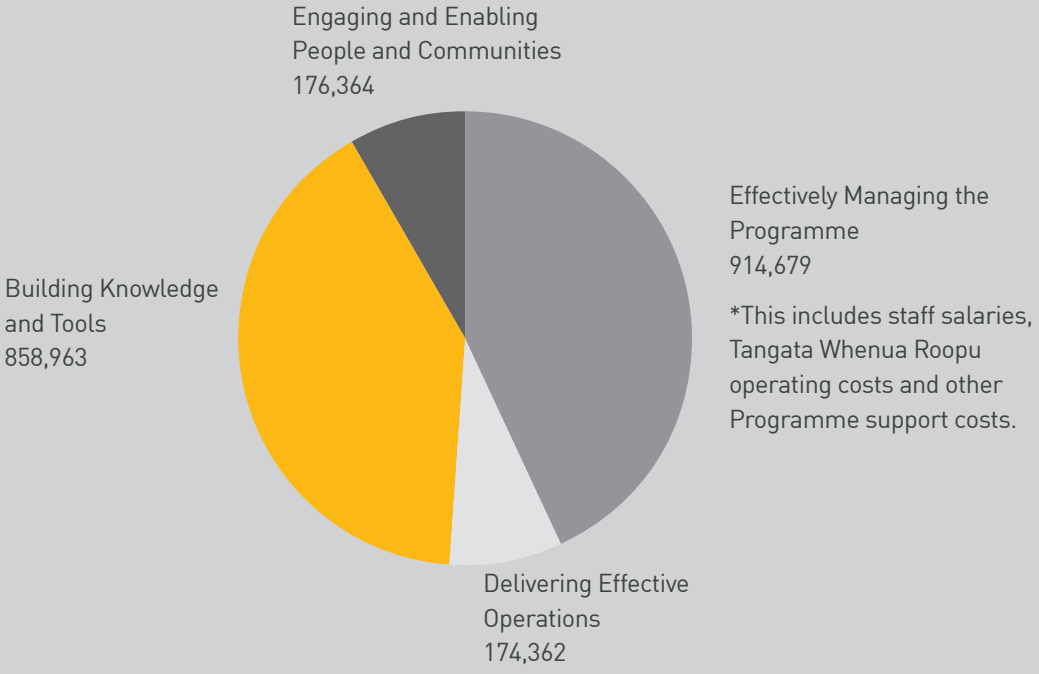
Mauri ora
Kaiarotake
Tangata Whenua Roopu

Expenditure for the 2015/16 Financial Year

Income



Expenditure*



* Does not include partner agencies' operational spend.

Photo: Chinese Conservation Education Trust

Key Work 2016/17

Effectively managing the Programme

Work will continue to lift standards and make general improvements across the Programme. This will include using regular reviews to identify and then apply key best practice and exploring possible alternative Programme structures. Programme standards will be further developed, and work will begin on a planned accreditation scheme.

Co-ordination across the Programme and with other parties will continue to be improved. Strategic relationships with mana whenua will be developed and managed in those areas where kauri naturally occur.

The monitoring and reporting on the Programme's progress will continue.

Delivering effective operations

A business-as-usual gap analysis and future service planning will be undertaken.

A review will be carried out of the processes around the Private Land Operations fund.

A programme of national active surveillance will be delivered.

There will be a continual process of infrastructure improvement.

An operations field manual will be produced.

GIS layers will be developed from historical data and spatial indicators.

Best-practice guidelines will be produced for working around kauri and for nursery operators.

Building knowledge and tools

A significant proportion of the Programme's work in this area during the 2016/17 financial year will be spent on multi-year projects, many of which are outlined on previous pages. New projects for the year include the following:

The deactivation of oospores using heat will be researched to determine if this is effective in deactivating oospores in contaminated soil, nursery plants, growing media and wood.

Work undertaken to test the principles and practicalities of using the Kauri Cultural Health Indicator (CHI) monitoring framework with regard to managing kauri dieback. Research will also be carried out to determine which CHIs can measure the mauri of kauri ngahere (how healthy a kauri forest is).

Photo: Te Rūnanga o Te Rarawa

Engaging and enabling people and communities

A risk analysis of various user groups and activities will be carried out to help the Programme in identifying key groups and activities.

Work will be done to secure the funding needed to roll out a pan-regional online advertising campaign that has been created for the Programme.

A second round of regional groups will have their kauri dieback work augmented by another round of The Tindall Foundation and The Aotearoa Foundation regional community support grants and well as smaller community engagement grants.

SteriGENE packs that include brushes and literature will start to enter retail outlets.

Track closures and other relevant kauri dieback features will be entered onto a single map for the benefit of all Programme and partner audiences.

A national brochure distribution system will be developed.

KAURI DIEBACK PROGRAMME

www.kauridieback.co.nz

Phone 0800 NZ KAURI (695 2874)

www.facebook.com/TheKauriDiebackManagementProgramme