



Meri Kirihimete from Kauri Rescue!

Despite the wet weather playing havoc with the start of our field season we are optimistic that it will stop raining soon and once the holiday season is over it will be dry enough for us to safely start issuing treatment kits and collecting monitoring data again.

This is the wettest spring we have experienced to date with the project and it has put us at least a month behind our usual schedule - so thanks to you all for your patience!

We will be taking a break from now until mid January, but we will be monitoring the inbox, so if there is something urgent that you need please get in touch and let us know.

We wish you a peaceful and relaxing holiday season with your whānau and friends and look forward to working with you again in 2023.

Meri Kirihimete and Ngā mihi o te Tau Hou (Merry Christmas and a Happy New Year) from all of us at Kauri Rescue.



Scale model of a mature kauri tree by Wētā Workshop

Wētā Workshop Kauri Model Spreads Protection Message

Award-winning special effects and prop company Wētā Workshop Ltd has created a scale model of a mature kauri tree for Waikato Regional Council to help spread the message about protecting kauri.

The model, which is a 1:82 representation of kauri that were present in the Coromandel Peninsula around 1850, is based on a tree known as Father of the Kauri which stood at Mill Creek, Mercury Bay. Father of the Kauri had a known trunk diameter of about 7.5 metres, which is more than 2 metres bigger than the 5.2-metre trunk diameter of Tane Mahuta, God of the Forest, in Waipoua Forest, Northland.

Kauri Protection Lead for Waikato Regional Council Kim Parker says the model, along with a virtual reality experience which is still being developed, is part of a mobile educational programme by the council to educate people about the importance of protecting kauri.

“We’ll be rolling it out to community trapping groups, landowners, mana whenua and supporting Thames-Coromandel District Council’s kauri ambassador programme to let them

know specific ways they can help protect kauri as individuals, and to inspire a bright future for kauri in the Waikato,” says Parker.

The kauri model will be installed on a custom-made trailer so it can easily be taken to kura, schools and community events.

“Our model shows the overall proportions of a mature, healthy kauri, including its massive, spreading root system which is a very important part of the kauri protection message,” says Parker.

Kauri need protection from a dieback disease caused by a microscopic soil-borne organism called *Phytophthora agathidicida*, or PA, that affects kauri through its roots, damaging the tissues that carry nutrients and water and effectively starving the tree.

“The best way to protect kauri is by stopping the movement of soil around kauri roots. Therefore, we wanted to show the root system to illustrate the size of the area that is at risk. Humans are one of the main ways of moving the disease as we can easily move the pathogen from site to site, by spreading soil on our footwear, tyre treads and equipment.”

Waikato Regional Council has been helping community groups introduce kauri protective behaviours, such as installing hygiene stations; supporting farmers to fence off kauri areas to prevent stock incursion; and supporting Thames-Coromandel District Council to deliver a track ambassador programme in the Coromandel Peninsula over summer.

Stopping the movement of soil around kauri is the best way to protect kauri.

- Construct fences to keep out stock – the council has specific funding to help with fencing costs.
 - Stop the movement of soil around kauri, including by cleaning footwear and ensuring all your gear is soil-free before and after entering a forest.
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You can order our gorgeous Kauri Rescue branded t-shirts and **new hoodies** [direct from our merchandise store by clicking here](#). A small donation from each purchase goes towards our project - thanks for your support!

'Instruction manual' to kauri dieback pathogen uncovered

Professor Rosie Bradshaw from Massey University together with Dr Nari Williams from Plant & Food Research and their team of scientists have completed the genome sequence of the pathogen that causes the disease, *Phytophthora agathidicida*.

This research brings us a step closer to winning the battle against kauri dieback disease with a deeper understanding of how *Phytophthora* pathogens infect their hosts and cause disease being critical for the development of effective treatments. Such an understanding can be gained by interrogating pathogen genomes for effector genes, which are involved in virulence or pathogenicity.

This is the first *Phytophthora* genome assembled to chromosome level. Further analysis of this complete genome assembly will help inform new methods of disease control against *P. agathidicida* and other *Phytophthora* species, ultimately helping decipher how *Phytophthora* pathogens have evolved to shape their effector repertoires and how they might adapt in the future.

You can [listen to Nari's interview on Radio New Zealand here](#) or [get access to the research article here](#).



New funding grant from Auckland Council

Huge thanks to Auckland Council for awarding Kauri Rescue a grant under the 2022-23 Regional Environmental Natural Heritage programme. We really appreciate your continuing support for our work along with that of our other major funders for this year The Biological Heritage National Science Challenge Ngā Rākau Taketake: Saving Our Iconic Trees programme and the Ministry for Primary Industries Kauri Protection Programme. We can't do our work without your support.



Learn the story of the Kauri Rescue project by [visiting our story map website here](#).
