Kauri Rescue Newsletter, December 2019



Athletes Join Ambassador Team

Top ranked athletes through High Performance Sport NZ joined the Kauri Rescue team recently to treat sick kauri trees on private land in Auckland. The property belongs to AUT Millennium CEO Mike Stanley and his wife Jane who have been treating their small forest of kauri trees for about a year already, but they have a big job on their hands, so some of the athletes are pitching in to help. On the treatment team was Eliza McCartney (pole vault) and Molly Meech (sailing) accompanied by 6 other athletes and the HPSNZ Athlete Life team as one of the High Performance Sport NZ community 'Give Back' initiatives. They were joined by Kauri Rescue Ambassadors who taught them how to monitor and treat the trees for kauri dieback disease with phosphite, which has proved effective at slowing progress of the disease.



Slow start to Summer

The weather has frustrated us and our participants with the rain continuing well into November and preventing us from getting out into the field safely. But since it has dried up we have been racing to get as many new participants issued with a kit and trained up to treat and monitor their trees as possible before the Xmas break.

So far this year we have enrolled 36 new participants and treated over 600 trees on private land, plus reassessed the health of more than 180 trees that have already been treated. The reassessment of treated trees by our citizen scientists is the most important part of our work so that we can see how the trees respond over time to the treatment. From these long term data in future we will be able to assess the most effective dose rates and consider when trees might need to be retreated.

New participant Nasha Sidhu (below) has just received her kit and is keen to make a start to treat trees on her heavily infected and enormous bush block north of Auckland. The Kauri Rescue team will support her by making an assessment of the infected areas and developing an action plan for treatment in the new year.



Kaukapakapa Buddies

The Kauri Rescue recently attended the Kaukapakapa market to recruit some local Ambassadors to assist Felicity and Dave Morgan with treating sick kauri on their 1000 acre farm. We had a fantastic response from the local community and ran a training day on the farm at the beginning of December to get the new buddy team up and running for the summer.

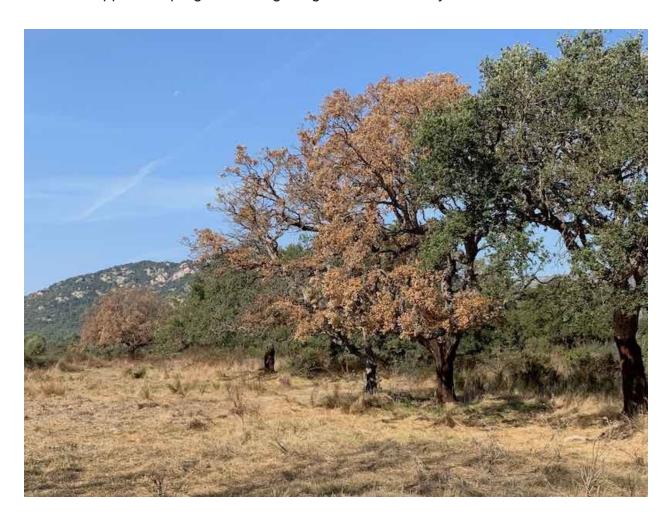


Join the Team

If you'd like to help us treat and monitor trees on private land we'd love to have you join our team of Ambassadors. Supporting landowners with large properties to treat and monitor their trees is an increasing feature of our work. There will be lots of opportunities to get out with our team onto some of these amazing properties around the Auckland Region in the new year. If you'd like to join the team sign up here: http://www.kaurirescue.org.nz/contact.html

Science News

Kauri Rescue team members Ian Horner and Lee Hill attended the International 'Phytophthora in Forests and Natural Ecosystems' Conference in Sardinia in October. The conference is held every second or third year in a part of the world experiencing significant problems with a *Phytophthora* species in a forest or natural environment. It is an opportunity for scientists working on similar diseases around the world to get together to share their research and experiences. Internationally, there are many *Phytophthora* species similar to the *Phytophthora agathidicida* that is causing kauri dieback, in many cases causing devastating diseases in forests, sometimes even more dramatic than kauri dieback! We can learn a lot from the experiences of others, and they can learn from us. At the conference, Ian gave a presentation on behalf of the team, outlining Kauri Rescue and the work we are doing. There was a lot of interest from the other delegates in the Citizen Science approach we are taking, and the fantastic support the programme is getting in the community.



University of Canterbury Engineer Dr Volker Nock has been awarded a Rutherford Discovery Fellowship to speed research into containing kauri dieback and myrtle rust. In both cases fungal pathogens infect the tree by growing long arms, known as hyphae - which are a bit like pressurised drill bits. You can read more about Volkner's work here: https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018720263/volker-nock-drilling-down-into-kauri-dieback

A fantastic review paper has recently been published in the international journal Plant Pathology by the top scientists involved in kauri dieback research and management over the last decade on where we are at with the research, surveillance and treatment, what the knowledge gaps are and where we need to go. You can read the paper here: https://bsppjournals.onlinelibrary.wiley.com/doi/full/10.1111/ppa.13104?fbclid=lwAR3jDLKvmeTluaZQYd1ZJ7wnv7ffxFwjnFCtSpRuvvrWoPqvN2xVhg_veHM

The latest news from New Zealand's Biological Heritage Science Challenge features decisions on the Government's surge funding investment for kauri dieback and myrtle rust. In addition to other exciting projects this will include funding for the development of tools for detection and management of myrtle rust and kauri dieback, for kaitiaki and land managers to deliver:

- Rapid diagnostic and field-based detection methods
- Alternative disinfectants
- Mātauranga Māori-based bioactives

You can read the newsletter here:

https://mailchi.mp/1abc20961563/ng-rkau-taketake-april-newsletter-2055029?e=503284 7226

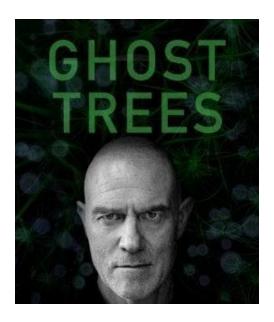
A University-led education and outreach project called Te Kura O Te Kauri has spent November 2019 aiming to inspire over 1000 students, teachers, family and community members to become guardians of their kauri forests. This project, led by Dr Monica Gerth, senior lecturer in Microbiology, worked to introduce schoolchildren to the science and mātauranga behind forest health, and to spread awareness about stopping the spread of kauri dieback disease. It was hosted in a travelling classroom, allowing Dr Gerth and her team to take the project to several school and community sites around the Northland region. Te Kura O Te Kauri incorporated different modules covering science, art, and mātauranga.

You can read more about the project here:

https://www.wgtn.ac.nz/news/2019/11/kauri-dieback-education-outreach

Ghost Trees set to Tour

Kauri Rescue participant Gary Stalker's play about his struggle with kauri dieback and cancer that featured in the Going West Books and Writers Festival is due to tour Northland and Rotorua in the New Year. The first dates for the new season will be in Titirangi's Lopdell House Theatre from 30 January to 2 February 2020. We will keep you posted with more news about dates and venues in our next issue.



Meri Kirihimete!

We'd like to wish all our Kauri Rescue Participants, Ambassadors and supporters the very best wishes for Christmas and the New Year. We will be taking a short break to recharge our batteries but will be back into it from mid January and look forward to connecting with you all again then. We hope you have a wonderful and peaceful holiday.

Kauri Rescue is funded for 2019/20 by Auckland Council



Copyright © 2019 Kauri Rescue, All rights reserved.