Research Policy Practice

NGĀ RĀKAU TAKETAKE
Saving Our Iconic Trees
from Kauri Dieback & Myrtle Rust

NEW ZEALAND'S BIOLOGICAL HERITAGE
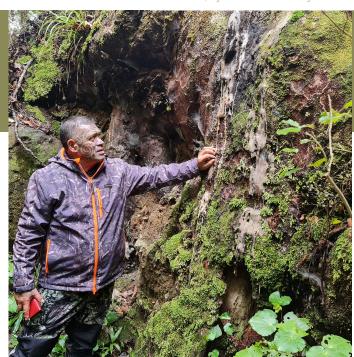Ngā Koiora Tuku Iho
National SCIENCE Challenges

ORANGA: FOUR YEARS OF KAUPAPA MĀORI PROJECTS

The Oranga Programme is a suite of kaupapa Māori projects that aim to restore the collective health of trees, forests, and people, in response to the kauri dieback and myrtle rust incursions, by connecting to and resourcing Māori communities and their environmental knowledge holders to explore solutions embedded in mātauranga Māori (Māori knowledge).

HIGHLIGHTS

Growing Māori research leaders
We've seen the careers of many Māori academics, researchers, and kaitiaki who've led projects in Oranga advance significantly. Oranga and NRT has given them the experience necessary to manage and implement research programmes elsewhere; gain promotions in their home institutions; engage with new communities; win additional funding and/or secure award nominations or awards for their work.

Creating a solution for kauri dieback
Oranga has led to the creation of a rongoa approach to address kauri dieback, and the construction of a kauri ora rongoa lab at Ōtiria Marae (Northland) which is set up with the necessary infrastructure to promote kauri health for many years to come.

Changing the language associated with a disease
Oranga researchers and advisors (Kāhui) lead the charge on the revival, adoption, and implementation of tikanga associated with kauri ora, particularly the refocusing of the wider programme from forest disease (kauri dieback) to forest health (kauri ora). This tikanga is necessary to promote the health of trees, and as a process it is inseparable from the physical application of rongoa to kauri.

AT A GLANCE

Oranga consisted of five complimentary projects:

1. Te Whakaora a Ngā Kauri - Rongoā Solutions for Kauri Dieback
2. Te reo o te waonui a Tāne - The language of the domain of Tāne
3. Hapū Solutions for Myrtle Rust
4. Te Mana Motuhake a Ngā Kākano - The Sovereignty of Seeds
5. Critical Friend - Evaluation, Measurement, Writing

Creating a tool that supports cultural revitalisation
Oranga researchers have created self-sustaining sonic stations that capture the soundscape of kauri forests whilst disseminating 'healing' sounds. In the creation of these sonic stations local mātauranga is required to ensure the right sounds are included. The acquisition and or creation of this mātauranga has supported Māori communities to reconnect to their forests and the associated mātauranga, and to create new knowledge, in the form of waiata (songs), moteatea (chants), karakia (incantations), for and about their forests. To our knowledge, sound sharing is an area of research that hasn't been conducted in forests before, it is largely used in reefs.

Building a mātauranga-based framework for plant disease management
Oranga researchers have created an Atua Framework which helps identify key contributors to an ecosystem's health, including what has contributed to the presence of myrtle rust in some spots.

Producing seed conservation education and outreach

Through education (training, wānanga, engagement), tool development and distribution (seed collection drums, seed conservation costing tool), Oranga has helped:

- Increase recognition within Māori communities that seed banking is an important part of ensuring kauri and myrtle ora.
- Increase recognition across the system that seed banking is intrinsically linked to Māori Communities' rights to self-determination and empowerment, which enables them to make decisions in line with the aspirations of their people now, and into the future.
- Increase recognition across the system that seeds, and accompanying Indigenous flora, are imperative for preserving cultural and biological heritage, and that preservation is best done by the communities that have a sovereign right to protect traditional species and associated knowledge i.e., mana whenua/ tangata whenua.

WHAT DIFFERENCE HAS IT MADE?

New money
Since the start of the project, Oranga has leveraged an additional $1.4 million dollars for kauri and myrtle ora research. These funds have also contributed to the construction of the rongoā lab at Ōtiria Marae.

New capability and capacity
Since the start of the project, relationships have been formed and strengthened with iwi, hapū and communities. People have been trained and with extra resources new and ongoing mahi has strengthened the capability and capacity.

Cultural revitalisation
Significantly this work has allowed for the revitalisation of tikanga associated with forest health and forest protection to be catapulted into the spotlight and shared by tohunga with kaitiaki Māori.

Saved trees
Rongoa has been applied, by Oranga researchers, to twelve kauri sites in Northland with promising results. Not only has the appearance of the trees significantly improved but observational evidence shows new bark growing over previously infected areas, new growth emerging on infected trees and in the understory of infected forests/kauri stands.

Increased awareness
Oranga researchers and work has been featured in 30 media pieces, and over 40 presentations including keynote presentation internationally. The rongoā approach to kauri dieback, and the inclusion of tohunga in forest health research has captured the hearts and minds of the wider public in large part because it's a clear example of how mātauranga can accelerate research.

An increased understanding of a healthy environment
Evidence suggested that the Projects' mahi helped iwi, hapū, individuals, organisations, and government to better understand the deep relationship between kauri, myrtle rust, and the surrounding ecosystem.

An increase in connections with and between Iwi, hapū, whanau
Instead of counting the number of partnerships the mahi produced, we focused on how the relational approach the Projects took to carry out their work led to a foundational set of relationships that are propelling the work forward (due to the use of Kaupapa Māori principles).

An increased research and community kaitiakitanga capacity
Capacity increases include development of rongoā infrastructure, increases in kauri ora and kaitiakitanga knowledge (broadly), professional development for Māori researchers, changes in how systems relate to kauri ora and Māori research, and increases in the availability of needed equipment to carry out the work.

Lifting (promotion) of Kaumatua, Tohunga, and Māori research
Oranga funding enabled existing capacity and promoted the knowledge necessary to work with kauri ora.

An enhanced focus on, and acceptance of, the Māori worldview
The Project leads saw an increased acceptance of Māori approaches and paradigms. This was seen through acceptance for Māori research in spaces where it has been continually and purposefully dismissed in the past.

FIND OUT MORE

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Data repository