

IWI, HAPŪ, COMMUNITY

- Nursery Network -





URUWHAKAARO

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He rau ringa e oti ai With many hands, the job will be done

- Auckland Botanical Gardens
- Auckland Council Parks
- Eke Panuku
- Healthy Waters
- Kāinga Ora
- Sustainable Business Network
- Te Whau Pathway Project
- Tūpuna Maunga Authority
- University of Auckland Gabriela Baron Design (Sustainability Conservation and Social Innovation)

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About the network

The kaupapa of the lwi, Hapū and Community Nursery Network is to share information, methods and seeds across native plant nurseries, and by doing so increase the biodiversity of native plant life across the Auckland Region.

It began when community nurseries identified a need to work collectively - to know who was growing what and where they were growing it. It aims to tautoko and encourage nurseries and potential nurseries to support one another by sharing knowledge about growing native plants.





The network also supports communications around how to set up and manage native plant nurseries.

Our objective is to create a space where everyone - schools, iwi, hapū, community nursery staff and volunteers - can all support each other through sharing stories about growing native plants and their experiences of organising volunteering events and facilitating workshops.

Summary of activity in the last year

Connected and shared nursery best practice

- We have connected with 15 nurseries, many requiring more than one visit, with three of these nurseries being lwi owned.
- We ran a variety of workshops. Topics were diverse and included capacity building, production planning, Seed Library management, seed collection and nursery design.
- We ran two regional hui one for the Southern Nursery initiative and one for Te Whau Pathway Project.

Supported leadership of the Nursery Network

We supported the network leadership onsite and through connections, with procurement and staff training contributing to this. Also we did this with the nursery workshops and hui.

Education and advisory

We advised and supported the planning of two new nurseries, run workshops and training. We have begun to implement the Taiao internship programme. We have continued to share best practices for health and safety.

Supported collective data

We initiated plant data being shared through the design, development and consultation for a Seed Library.

Nursery visits

We visited iwi and community-based nurseries, managers and staff.

Many of the participating nurseries and notes about the visits are listed below.

Nursery	About our visit
Nga Uri o Hau Native Nursery	We visited to catch up with staff and see the expanded areas. This was in anticipation of the nursery supplying plants to the Kaipara Moana Remediation (KMR).
Reforest Nursery Omaha	This visit to a commercial nursery. They had just one full-timer and one part-timer growing nearly 100,000 plants. They are supporting the network with surplus seeds.
Whenuanui Nursery	We visited this nursery to hear their aspirations and challenges around funding, potential clients and their suitability to get KMR accreditation.
South Auckland Corrections	We visited Wiri Men's Prison to discuss setting up a nursery and collaborating on large tree requirement projects. We also covered training potential and the long term sustainability of education.
Makaurau Marae	We had multiple visits to Makaurau Marae to explore their potential to increase supply to the nursery. Maukaurau are investing time to develop intergenerational business plans this year. The photo below shows nursery enterprise planning on site with Charmaine Bailie, Sam Judd and Sophia Olo-Whaanga.



Maunga Whau Nursery We made several visits to this nursery in early 2022 to give assistance with plant production lists and help with a full site clean up during their volunteer day.



Kaipātiki Project Nursery

We visited the nursery in Birkdale to check in with volunteers over the potting table and to reset basic practices. The Kaipātiki Nursery is a source of inspiration and is often visited by other volunteer nursery teams for advice. Derek Craig (photo on page 4 under About the Network) is a leader in this space and often called on by the Upper Waitemata Ecology Network, Restoring Hauraki Takarunga and Pupuke Bird Song to name a few for seed collection advice.



Pourewa Nursery

We visited Ngāti Whātau Ōrākei to connect with mana whenua and Kāinga Ora and discuss social procurement opportunities.

Waitōtara Sustainable and Resilient Living

We visited this nursery that specialises in growing plants for the Upper Waiwera Catchment.

South Kaipara Landcare A visit was made to this community nursery in November 2021 when they were in the middle of relocating. This nursery was seeking KMR accreditation.



Motutapu Restoration Trust Nursery We facilitated collaboration with Ngai Tai Nursery. They have excellent sheltered facilities and propagation space with a large hardening off area for revegetation at scale.

Chris Pairama in the area of Reweti

A visit to advice on a backyard nursery for kauri whānau species.

Taporapora Landcare group

This was a site visit to plan the design and explore funding options.

Potential Nursery Ranui This hui, at 75 Glen Road Ranui, was to discuss the opportunities and synergies for the community of a nursery. We are looking to co-facilitate a hui in the last quarter of 2022



Workshops

Ngāi Tai ki Tāmaki held a series of workshops on Motutapu, from December 2021. The purpose of these workshops was to upskill staff and volunteers in production planning propagation, seed collection/ storage, cuttings, potting on, nursery construction, stock grading / quality control hygiene including the management and reuse of old soils.

Makaurau Marae Nursery had also planned a series of hands-on workshops for seed collection over three weeks in April 2022 looking at coastal forest harvest from the Manukau habour area However this has been rescheduled due to weather and timing, they will be rescheduled after capacity planning hui in September.



Piritahi Marae on Waiheke the kaupapa of this workshop was to learn how to design a nursery. Looking at all the elements of planning, production schedules, species to grow, where they can source seed and who or where they would be growing for. Staging the work in line with maramataka.

Production planning for seed collection also happened with Upper Waitematā Ecology Network and Restoring Hauraki Takarunga nursery coordinators and volunteers. Workshops included sourcing, quality and production planning, and focused on the preparation required before any Volunteers / nursery staff commenced harvest; these were online workshops due to Covid in person restrictions. Stage two in the field workshops are being rescheduled from Dec 2022 to March 2023 during peak harvest season.

Presentations and hui

Annual Hui

The Annual Hui was postponed twice due to Covid and Auckland being at Level 4. It was agreed that this will now take place in March / April 2023. An update on this to be sent out in September 2022.

Online sub-region hui

Te Whau Pathway Project Nursery Connection Hui

In December 2021, we facilitated an online hui for the West Auckland initiative Te Whau Pathway Project. The purpose of the hui was to discuss TWPP Nurseries short and long term goals, to understand who is doing what in this space and how they would like to be involved, explore opportunities for TWPP Nursery within the nursery network and to discuss how we can work with local schools and partner with Trees for Survival.

A wide range of stakeholders were invited, with attendees including Community Waitākere (from the nursery in Te Atatū Peninsula), Conservation West Team (Whau Wild Link), Environmental Services (Auckland Council), Friends of Sunhill Scenic Reserve, Million Trees Programme, Sustainable Schools team, Urban Ngahere advisory (AC), Waitākere Community Ranger, Whau Local Board and Henderson-Massey Local Board and members from Whau River Catchment Trust.

Here is some of the feedback that this hui generated.

Have a clear work programme that defines how we all will work together.

A different way of thinking about restoration sites is needed. Support existing nurseries, understand that capacity and see where we need to support further.

The issues that need to be discussed are the initial preparation of sites and the maintenance that follows. There are also concerns about Auckland Council maintenance costs that need to be discussed. before planting begins.

Need a centralised coordination role ... someone who understands the kura ... and has experience with propagation. [We need] a continual drive to implement on the ground, in the right way, linking up the plan with the schools ongoing to ensure the success of the project.

Vast majority of schools in the Whau will have kai gardens - can we expand that out to parks? Having localised parks in each part dedicated to different parts of the Whau with food provision for the community.

Southern Nursery initiative

This online hui was held on 30th March 2022. It was an open forum to discuss how we can work together towards the sustainability of the nursery industry. Aspiring nurseries also attended, to discuss the plant supply of ngahere restoration projects in South Auckland. Attendees included

- Mana Whenua (some with nurseries and others aspiring) including Ngaati Tamaoho,
 Ngaati Te Ata, Ngāi Tai ki Tāmaki and Ngāti Whātua Ōrākei.
- Nurseries (both operational and aspiring) including Ambury Park, Auckland Botanic Gardens, Makaurau Nursery, Maungawhau Nursery, Papatūānuku Kōkiri Marae, Pourewa Nursery, Te Whaangai Trust, The Wild Nursery and Wiri Prison.
- Iwi, hapuu and community organisations with projects in the Southern catchment
- Representatives from local government agencies working in taiao regeneration including Auckland Council (both Eke Panuku and Healthy Waters) and Kāinga Ora.

Upper Waitematā Ecology Network

Nursery niche programme

The UWEN Nursery niche programme was facilitated by Nicholas Mayne. He worked to coordinate a group of volunteers for training in seed collection, storage and nursery propagation. He also supported backyard growing for the return of plants to public space restoration projects in the Upper Waitematā.

The purpose of this programme is to share knowledge and guidance around seed collection, seed banking and protocols around this, ongoing communication and support between volunteers and nurseries.

Para Kore and Sustainable Practices

Nurseries are more conscious now about the lifecycle of their resources. Para Kore (sustainable practices) are happening in nurseries in our network as they upcycle materials that would have otherwise gone to landfill. The sharing of excess used trays and pots within the network has become the norm.



One great example was the rescue of PVC piping from Mahurangi Wastebusters (in Snells Beach) being repurposed for a greenhouse on Motutapu.

In the photo on the left, you can see that rubber mats from Scott Point no longer required being rescued by Nicholas Mayne and Derek Craig for repurposing.

Communications

Channels used to facilitate network communication include social media, apps and email.

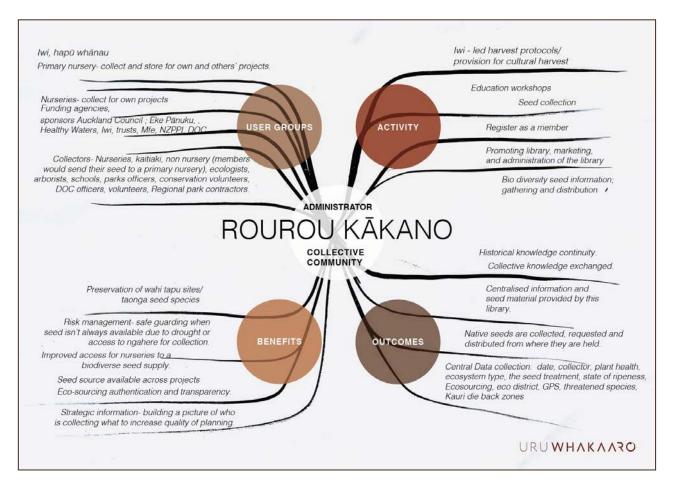
 Facebook is used for updates and to share knowledge and inspiration across the nurseries. Our Facebook page has seen an increase in engagements from 200 to 4350 engagements in the last year while there has been constant sharing and notifications for the year.

- WhatsApp was set up at the request of nursery coordinators and is used sporadically by only a few. We look to share this further to make it a more effective tool.
- **E-Newsletter** We are looking to set up a regular newsletter going forward where standardised information can be shared. For example, we would like to have parts of the newsletter dedicated to pest management, biosecurity, Health and Safety issues and inspiring nursery stories.

Seed Library

There is ongoing discussion about a Seed Library's design and structure for the network. There has also been discussion of an eco-sourced seed collection and seed banking that is aligned with maramataka. A working group of nursery managers will peer-review the data design. Other stakeholders have included arborists, Auckland Council (including the Urban Ngahere team), Environmental Data management providers, Nurseries (iwi, commercial and community-based), Parks Officers and Seed Collectors.

The image below gives a snapshot of all the stakeholder, activity, benefits and outcomes for the Seed Library.



Nurseries have been requesting a **seed guide** with seed collection protocols. This is ongoing work. After it has been developed it will need collective support and sharing in the network.

Kaiawhina Taiao - Internship programme

About Kajawhina Tajao

In 2021, it was envisioned that internships would be part of the "kaitiaki team", with interns being rotated around different restoration nurseries, projects and sites. The internships were subsequently created, with the purpose being to create employment and education opportunities that also met the needs of environmental programmes.

Implementation of kaiawhina Taiao

Consistent feedback from nurseries has been around needing trained people with relevant skills, knowledge and hands-on experience to be able to step into employed positions in the nurseries. As a response to this need we have developed a prototype internship programme that allows us to test the model for both the intern and the network. Over-time and with adequate funding we aim to increase the number of interns and refine the programme as it progresses.

The first internship began in April 2022 with Ariki Wyatt, currently working part-time (32 per week) across diverse environmental programmes. Ariki developed a social media strategy to increase volunteer engagement and participation during planting days on Motutapu Island as part of his work.

The Taiao Internship work varies and includes restoration, planning and design of taiao projects, presentations, project management, Para Kore events, working on edible landscapes, coordinating community volunteers and reporting about these activities.

One-sixth of the Taiao work is nursery-focused and includes seed collection and plant production management. This work is done concurrently with study - specifically Level 3 Horticulture papers - as delivered by a Primary Industry Training Organisation.

To date, Ariki has worked with Motutapu, Kaipātiki Project and Maungawhau nurseries. Next steps in his programme will be specific crop management and Nursery volunteer coordination.

Next steps

Currently working with key stakeholders and potential organisations for intern placement. Once finalised, the programme can be circulated wider and recruitment can be advertised.

Current challenges

Our nurseries are facing a diverse range of challenges from capacity development to needing smaller nursery network hubs in different ecological regions. We have attempted to detail most of these here.

People

The challenges in the last year have included successional planning, the strengthening of volunteer programmes and more support and advocacy for nursery staff. Covid has also been a consistent threat to people working in nurseries. Lockdowns and illnesses have had a huge impact on staffing and/or volunteer levels and the ability to service existing contracts and clients.

Increased costs

Nursery supplies are more expensive. Items such a potting mix, trays and pots have all increased in price.

Knowledge gaps

We have identified a need for more soil and seed-saving workshops across the network. We also think that more help is wanted with nursery management, nursery hygiene, data collection processes and capacity development.

- Having a shared template to record and track where plants were being sourced, grown, and then planted out (in hard copy and digital formats).
- standardise what data collected and how it is recorded and protocols for sharing?

Shared communication channel

A shared communication channel is needed to raise awareness of what nurseries across the network are doing, and to celebrate success stories. We found that smaller nurseries needed more support to access resources, and it was suggested that a communication channel could be used to trade with and support one another in some way.

Seeds

Seed collection, training, permissions and storage is an ongoing challenge. Clarity was needed around the permission-to-harvest process. There is now a working group in Auckland Council to assist with resolving this process.

Myrtle Rust

This year, two nurseries were hit particularly hard by Myrtle Rust and they have consequently reported large losses. On Motutapu alone, over 10,000 infected plants had to be destroyed.

Aspirational nurseries

There has been an increase in requests for assistance in developing new nurseries. In response to this, we developed a list of criteria for people to consider before planning a native plant nursery. The list covered topics such as infrastructure needed, capacity for growth, workforce availability and knowledge, production planning, seed collection and seed banking, potential client base, cash flow forecasting and understanding of the competition and market.

We have given assistance when requested with nursery plans, costings and potential clients. Some nurseries are being set up to cater only for upcoming planting projects in their area, others are looking to cater to an ongoing demand in the market for hard-to-get species.

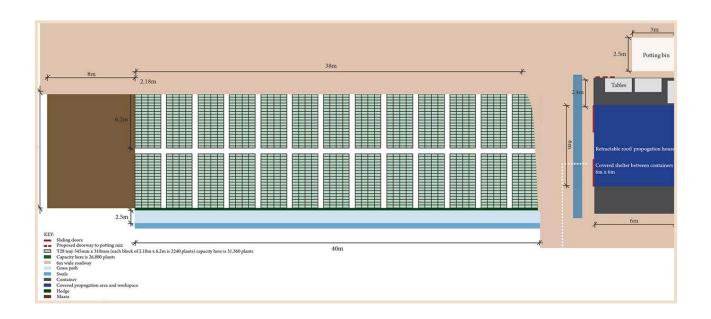
Taporapora

Taporapora is an example of a potential new site where we helped with some onsite design and planning in February this year.



Te Aroha Pā

Te Aroha Pā was another aspirational nursery that we assisted in summer this year, by visiting and contributing to the nursery's design and planning.



Ranui Community Collaborative Nursery



Auckland Council's new Urban Ngahere programme has a goal of increasing tree canopy cover across Tāmaki Makaurau. A key aim of this programme is to support iwi and community nurseries to increase growing capacity to meet the future anticipated demand for (large) native trees for public spaces. In response to this aim, David Bowden is investigating the development of a nursery at Glenn Road, Rānui. In May 2022, Mana Whenua and key community stakeholders including representatives from West Auckland community-based nurseries were invited by David Bowden to look at a potential new nursery site. The opportunities and synergies for the community were discussed. This is a good example of how the lwi, Hapū And Community Nursery Network can support and explore new initiatives. We are looking to co-facilitate a hui in the last quarter of 2022.

Future plans

Auckland Council partnership for the Network

This project is now one of several projects funded through the Ngahere Programme, within the Climate Portfolio of the Long-term Plan 2021-2031. Other projects in the Ngahere Programme seek to substantially increase the council's investment in tree planting (both urban amenity trees and ecological revegetation), to contribute both to carbon emissions reductions and climate resilience/adaptation. The tree planting undertaken in these other projects is likely to be undertaken directly by council and by iwi and community groups. While increased tree planting will result in a range of environmental and social benefits, it also comes with some risks, particularly a risk of increased spread of pests (plant diseases, weed seeds, insects, plague skinks and more) to new locations. This is especially problematic for ecological restoration programmes that plant into or near sensitive ecological environments, including in areas such as remote offshore islands which pests might not otherwise be readily able to colonise. Concurrently, climate change will further exacerbate many pre-existing and novel pest risks/issues. In recognition of these risks, a proposed project was included in the Climate Portfolio Ngahere Programme, to support improved nursery biosecurity for kaupapa Māori and community nurseries supplying ecological restoration. Community-led restoration plays a vital role in protecting and restoring native habitats. The growing interest in re-establishing continuous or stepping stone connections across the landscape has been supported by the set up of a range of community nurseries to supply native plants for restoration initiatives.

There are now many iwi, hapū and community nurseries across Auckland, supporting local restoration projects and the locals themselves. With the focus on building ecological corridors and amplifying community restoration efforts. The coming year builds on this existing pilot work undertaken to establish a network of kaupapa Māori and community nurseries to share information relating to running nurseries for indigenous revegetation. The focus of this project is now about solidifying previous efforts to establish the network, creating solid support structures within the iwi, hapū and community nursery network for ecosourcing; biosecurity management; capacity building and volunteer knowledge sharing. Specifically this project aims to provide the following to iwi, hapū, community Nurseries that grow plants for ecological restoration; support in networking to share knowledge and experiences. The 2022-23 service agreement between Auckland Council and Kaipātiki Project has been co-created with Uru Whakaaro to reflect this.

Nursery Network Survey

In 2021, a Nursery Network Survey was sent out to 40 nurseries. The purpose of this survey was to gain a better understanding of how various nurseries operate, what was being grown and where, so that the network could better collectively support native forest restoration across the Auckland Region. The Seed Library programme was one of the needs identified by this survey.

This year, we make Nursery Network Survey relevant to the challenges and opportunities of 2022. This updated survey will then be sent out to an expanded network of 58 nurseries.

Potential clients for nurseries

We will work with potential clients to understand nursery seasonal timetables and processes that affect quality eco sourcing. We will explore the following topics

- how much forward planning can you give the nurseries
- should you buy off the shelf in the same planting season or 18 months prior to allow for authentic seed / eco sourcing to occur
- the ability to replace species that won't diminish biodiversity objectives.

Workshops

A variety of workshops will be delivered in the next year. These include

- Design for Sustainability, Conservation and Social Innovation with Auckland University
- Nursery production workshops for general nursery audiences
- Rolling out the 'Plant Pass' information with John Little.
- Seed Library Design co-facilitated with Gabriela Baron
- Workshops tailored to meet the needs of individual nurseries