

OUR TEAM



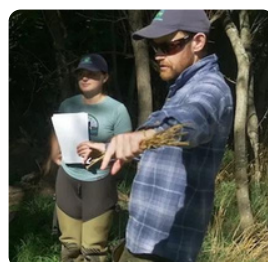
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THE SCROLL



Tiaki Maniototo

The Newsletter of Tiaki Maniototo
www.tiakimaniototo.co.nz

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A WORD FROM THE PROJECT MANAGERS



It feels like just yesterday we wrapped up the commotion of spring planting, placing 32,000 plants into the ground with the skilled hands of Habitat Restorations Aotearoa. Yet, we have already begun planting 25,000 more plants. It's a testament to the commitment of our team and the dedication of the landowners across the Upper Taieri catchment. Establishing our plant nursery in Pātearoa has injected more excitement into our efforts. From hiring new staff to collaborating with local contractors. The nursery goes beyond growing plants; it's a vibrant hub for community building with a unique ability to toughen plants in our challenging environment. We are confident it will lead to even higher survival rates going forward.

With drought conditions continuing to offer little remorse to our plants, we recognise that the impacts of these conditions are felt throughout the farming community. Understanding that many will be placing riparian fencing and planting projects on the back burner, we wish to highlight how we can discuss means of continuing to increase freshwater conservation in the catchment in a way that has minimal financial burden to the landowner. Times like these highlight the importance of water to our community.

– Caitlin and Colin

UPHOLDING THE RIVER FLOW

At this time of year, the upper Taieri would look very different if it wasn't for the large quantities of water being diverted from the Loganburn reservoir by Maniototo Irrigation Company (MIC). Since January, MIC have been voluntarily releasing water over and above their ORC consent conditions down the Loganburn creek into the confluence of the Taieri River to maintain a minimum flow of 1,000 litres per second at Waipiata. This increases water flows, helps maintain water temperatures for the freshwater ecosystem and quite likely prevents parts of the upper Taieri from being considerably low. All of which are vital parameters for a functioning and healthy catchment.

FESTIVAL A SUCCESS

The inaugural Tiaki Maniototo Taieri Wai River Festival, held on January 20th at the Pātearoa school, was a great success, with over 300 people showing up to enjoy live music, food and learning opportunities.

A team of local volunteers put in a big effort to get everything set up, preparing the site and helping Ewan Mason set up his sound system on the trailer generously provided by Ranfurly Transport.

The event was everything we hoped it would be and more — a great country festival, well-attended by locals and visitors from outside the area. Food and drink was taken care of by the Waipiata Country Hotel and Alchemy Alley who provided a range of local delicacies to keep everyone going.

A bioblitz was held on Shortland Station the previous day, with the collected specimens brought to the festival site for examination on the Saturday. Kids and adults alike were enthralled to learn about freshwater ecology from ORC's Jack Mathieson, local wildlife from Carey Knox and prehistoric Otago forests from Mike Pole.

Dunedin bands Jo Little and Jared Smith, Maplewood String Band and Tahu and the Takahē kept everyone entertained with over four hours of music. Fish and Game provided entertainment for the kids with their fantastic casting game.

Based on this year's event we can confidently say we will run it again next summer, and that's entirely due to the support the community gave it this year. So thanks everyone for being part of it. See you all in 2025!



FESTIVAL SPONSORS:





Photo: Habitat Restorations

The Habitat Restorations Aotearoa crew have been flat out over summer, planting tussocks, flaxes, carexes and much more along waterways and wet areas across the basin. This incredibly hard working team have now surpassed a total of 64,000 plants, an incredible achievement that puts us on track to demolish our initial target of 90,000 plants by 2026 much sooner than expected.

Once established, these plantings will help seed new growth downstream. The more natives we can get back into this environment, the better chance we have of restoring lost ecosystems for native birds, reptiles, plants and insects.

64,000
PLANTS IN
THE
GROUND!

FRESHWATER MONITORING UNDERWAY

Over the past few weeks, Tiaki Maniototo staff have been out with the Department of Conservation monitoring water quality across the upper Taieri catchment. The work involves eDNA sampling, fish monitoring, water quality and measuring suspended sediment in the water.



“We assess overall stream health by carrying out habitat analysis and monitoring,” says field officer Eilis Hogan.

“By doing these surveys we can identify areas of good or poor stream health and monitor the waterways over time.” The team have also been setting nets to see what fish are present in the river. They’ve been finding longfin eels and brown trout in most waterways. Native galaxiids tend to be limited to the tributaries.

The team are also surveying macro-invertebrates like stoneflies, which are a great indicator of water quality. By gathering this information, DOC and Tiaki Maniototo can gauge where in the catchment the most important areas for remediation work lie.



Longfin eels (tuna) once migrated up the Taieri/Taiari in their millions. For Māori, they were a crucial food source, harvested during summer and autumn months and stored to be consumed or traded through winter.

TUNA ACCESS

Tuna migrate into the headwaters of rivers like the Taieri/Taiari, where they can live for decades before returning to sea, travelling thousands of kilometres into the Pacific to breed.

Hydroelectric dams can impede tuna migration and may be a factor in their low numbers. The Taieri/Taiari is New Zealand’s fourth longest river, and is unique in that for most of its length it is not dammed. There is just one dam, at Paerau. Tiaki Maniototo are working closely with Manawa energy, who control the Paerau structure, to improve existing eel ladders on the dam and to ensure our precious eels can live out their lives as naturally as possible.

WILLOWS IN OUR SIGHTS

The willow destruction team put together by Habitat Restorations Aotearoa has been busy in the Styx basin killing willow trees, which pose a major threat to the scroll plain ecosystem. The plan is to start high in the catchment and move down, spraying willows as they go. Team leader Glen Riley reports hundreds of willows have been sprayed or pulled out by hand. Willows are incredible growers,” he says.

“They have a strong will to survive. And so your methods have to be really precise.” Crack willow will sprout from broken stems and twigs, meaning the team has to work methodically and carefully to get every last seedling. Extreme care also has to be taken to avoid contamination of waterways and adjacent farmland with chemical sprays. Clearing willows from the Upper Taieri is an enormous task, but by working slowly down the catchment, we hope to one day get on top on them.



Photos: Habitat Restorations

The Tiaki Maniototo nursery at Pātearoa is well and truly up and running now and has proved to be a popular site for the community.

Manager Sarah Anderson says around 30,000 plants were nurtured through the heat of summer. While these plants have all been brought to the site from established nurseries in Otago and Canterbury, the plan is for our nursery to start propagating and to become self sufficient in plants over the next few years.

To this end, Sarah and the team have been out collecting native seed from the surrounding countryside. These seeds will be propagated and eventually planted back into the environment from which they came. The hope is that these locally-sourced plants will thrive and form the basis of a valuable community asset..

NURSERY GETTING UP TO SPEED

PUBLIC ACCESS

It’s all too easy to ignore rivers as we drive through a landscape, flying as they do past us when we cross via a bridge. Part of our mission in the Maniototo is developing recreational sites along the river at which the public can access the waterway and learn more about the freshwater ecosystem.

We are developing a network of sites throughout the basin that we hope will be a tourism asset for the region in the future.

It is important that the public are able to access the river so they can connect with it, use it for recreation, and in doing so, understand it better and care for it.



PLANTING GUIDE FOR THE MANIOTOTO

Kōwhai (*Sophora microphylla*) **8m. Dry areas**

A tough tree that can withstand dry conditions and which brings in birds to feed on nectar. Thought to have been common in the Maniototo pre-forest clearance.



Cottonwood (*Ozothamnus leptophyllus*) **6m. Dry areas**

This rapid growing shrub is a prolific coloniser of dry, exposed sites. Green to gold foliage is fine and dense. Bears clusters of scented large flowerheads in Spring/Summer. Evergreen. Hardy.



Mountain Flax (*Phormium cookianum*) **1.5m. Dry areas**

This flax's large root system is good for erosion control on banks and bunds. Tolerant of dry, cold and exposure.

Tangled Coprosma (*Coprosma intertexta*) **2m. Dry areas**

A divaricating South Island Coprosma found in inland basins, dry scrub, and rock outcrops. Green-yellow flowers emerge in Summer and bear white fruit. Great food for native fauna. Evergreen. Hardy.



Scented Tree Daisy (*Olearia odorata*) **3m. Damp-Dry**

A small shrub suited to damp or dry conditions. Very tough, withstanding wind and drought.



Toetoe (*Austroderia richardii*) **2m. Wet - Damp**

Attractive to birds and insects. Creamy flowers. Good wind break once established as they grow in clumps, are very hardy and can withstand many weather conditions.



Purei (*Carex secta*) **1.5m. Damp, Wet**

A large, fast-growing green sedge. Attractive stream-side and wetland plant. Extensive root system is excellent for erosion control. Prefers wet soils. Hardy.



The Maniototo, with its hot, dry summers and bitterly cold winter frosts, is one of the toughest places for native planting in New Zealand.

But by choosing species carefully and helping them out with watering and weed control, you can successfully establish native vegetation on your farm or in your garden. Here's some ideas to get started with.

OUR STORY



Tiaki Maniototo

In 2001 a group of local farmers got together to start the Taieri Trust, one of New Zealand's first catchment groups. This later became Upper Taieri, then Upper Taieri Wai. The group's purpose is to protect and promote best use of the Taieri water resource for the benefit of the community, the environment and the economy. In 2021, Upper Taieri Wai successfully applied to the Ministry of the Environment's Freshwater Improvement Fund and was granted 4.55 million dollars to start a project called Tiaki Maniototo.

Tiaki Maniototo was established with the acknowledgment that increasing intensification of agriculture in the district had affected water quality in the Taieri river. The group's mandate is to protect and enhance water quality in the upper Taieri catchment, through riparian fencing, planting, weed and pest control.

Our project targets come through collaborations and we work closely with the Otago Regional Council, Department of Conservation, Maniototo Irrigation Company, Otago Fish & Game, Herenga ā Nuku and farmers as we move forward to develop a Catchment Management Plan for the Māniatoto scroll plain.

Community support has been key and we could not have got to where we are today without the time invested by our local communities of volunteers and part time nursery support staff.

Tiaki Maniototo is a five year project that is now half way through its tenure. Our original aims were to plant 90,000 plants and fence 200 kilometres of waterways. We are well on track to greatly exceed these goals. We are also working with ORC to tackle the willow problem in the catchment and keep on top of geese numbers. We are also developing recreation sites along the river; places that people can access the Taieri and learn more about it.

WHAT WE'VE ACHIEVED SO FAR



- 64,000 PLANTS IN THE GROUND
- 54 KILOMETRES FENCING
- 23,000 GEESE CULLED
- THOUSANDS OF WILLOWS DESTROYED
- WATER QUALITY SAMPLING
- CREATED A GALAXIID SANCTUARY
- BUILT A COMMUNITY NURSERY
- 2500 VOLUNTEER HOURS FROM OUR TECHNICAL ADVISORY AND GOVERNANCE GROUPS



ONE OF THE WORLD'S GREAT WETLANDS

Sprawling over almost three thousand hectares from the upper Styx basin to Waipiata, the Upper Taiari/Taiari scroll plains are “really what I would consider to be one of the natural wonders of New Zealand,” says Manaaki Whenua/ Landcare New Zealand ecologist Bill Lee, who has studied the region’s diverse ecosystems extensively.

“You get everything from oxbows, old braids, backwaters, cut-off meanders. You get ponds that have been isolated for a long time. Some have peat in them, and others are just entirely fresh water. Then you’ve got these ephemeral wetlands dotted in amongst them, some of which have salt accumulation so they tend towards salt tolerant species being there. Such a myriad of different wetland types wrapped up in what we blanket as the Taiari scroll plain.”

The scroll plain’s spectacular meanders and scrolls provide habitat for native fish and waterfowl, which would have flocked here in their millions in prehistoric times. Kāi Tahu narratives speak of the river running black with tuna (eels). Kanakana (lamprey) would also have migrated here in their tens of thousands. This area is a crucial traditional māhika kai (food gathering) site for mana whenua and today hosts a famous trout fishery. It is also an important site for gamebird hunting.

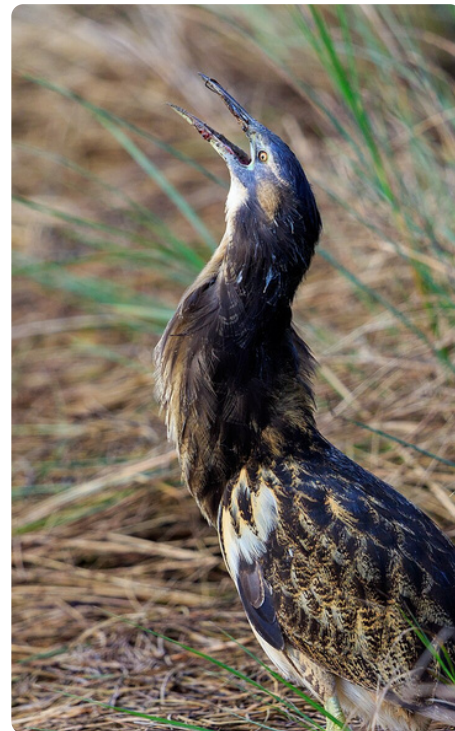


Photo: Imogen Warren

Wetlands have a crucial role to play in sequestering carbon and regulating water flow in river systems. They also provide a huge amount of habitat for native and exotic species.

The upper Taiari wetlands are home to more than 52 bird species, including rare species such as bittern and marsh crakes. They support many rare plants, reptiles and insects.

New Zealand has lost over 90 percent of its original wetlands and those that remain are under threat from pollution, sediment issues and development. The scroll plains need a high level of careful management and protection.

Lee says “the hydrological driving force, or life, of the scroll plains is relatively intact. Even though the vegetation and habitat has been modified extensively by fire and by grazing, it’s restorable because residual native plants are still there in the wetter parts of the scroll plain. We need to step back and allow it to flourish under its own terms.”

To learn more about our subsidised fencing programme, please visit:

www.tiakimaniototo.co.nz

NEW ZEALAND'S FIRST PRIVATE GALAXIID SANCTUARY



In November we were thrilled to open Spec Creek, New Zealand's first private galaxiid sanctuary. Farmers Phil Smith and Hamish Mackenzie collaborated with Tiaki Maniototo to create the reserve, which boasts a carpark, walkway and information panels. The reserve is designed to provide good quality habitat for Central Otago roundhead galaxias, which are plentiful in Spec Creek.

To this end, Phil has fenced off a section of the creek from cattle. He will continue to lightly graze sheep in the reserve, which will help keep the weeds down.

The site is all about education and promoting awareness of this endangered species.

Despite the cold and wet weather on opening day, a large group turned out, including a fantastic group of kids from St John's School, who unveiled the main kiosk for us.

Phil reports the sanctuary has had a steady stream of visitors since it opened. The Google Maps location has had over 5000 views. Spec Creek is a lovely, peaceful place for a walk and one of the best places in New Zealand to spot a native galaxiid. It's open to the public year round, so please do take the time to check it out.

