



Catchment Group Story

Auckland/Tāmaki Makaurau | JULY 2024



Te Korowai o Papatūānuku

Āwhitu Peninsula

The Āwhitu Peninsula is a scenic and ecologically rich area of Tāmaki Makaurau, with a distinctive geographical positioning that creates a diverse array of streams, wetlands, and dune lakes. These ecosystems support a variety of native flora and fauna, some of which are rare and endangered, making the Āwhitu Peninsula a unique site for freshwater conservation and restoration.

Te Korowai o Papatūānuku (the Cloak of Mother Earth) is a collective project undertaken by Āwhitu Peninsula Landcare, Ngāti Te Ata Waiohua and Auckland Council, aiming to regenerate the Āwhitu Peninsula with 250,000 native plants. Whilst propagating, supplying and supporting local communities to replant the land, Te Korowai o Papatūānuku have also formed a partnership with 'Wai Connection – Tatai Ki Te Wai' to incorporate freshwater care on the peninsula.





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The team at Mountains to Sea have been a fantastic source of expert knowledge and learning from them has been an absolute pleasure. We are very excited for the future of freshwater conservation on the Āwhitu.

SARAH MANSELL – Manager
Āwhitu Peninsula Landcare

I really enjoyed the hands on training for finding the saline wedges at Waipipi. It was very engaging and gave a great insight into the inanga preferences.

KARA GODDARD – Conservation Advisor
Natural Environment Delivery | Environmental Services
Auckland Council

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PHOTO CAPTIONS – Front page: Group photo from the spawning workshop, including members of Ngāti Te Ata Waiohū Kaitiaki team, Āwhitu Peninsula Landcare team and committee, 'Wai Connection' Auckland team and local volunteers. **This page:** 1. 'Wai Connection' coordinator Anastasia introducing inanga and their unique life cycle. 2. Participants taking salinity readings to find the saltwater wedge. 3. Ngāti Te Ata Waiohū Kaitiaki team demonstrate installation of straw bales, making sure they won't float away. 4. Ngāti Te Ata Waiohū kaitiaki-in-training enjoying the hard work to hammer in waratahs. 5. The first demonstration in installing artificial spawning bales. **Back page:** 6. NĪSP coordinator Sarah explains the kind of habitat inanga like to spawn in, and how to measure and record it. 7. Getting our hands dirty to try and find some inanga eggs – there's lots of ground to cover! 8. Āwhitu Peninsula Landcare team taking salinity readings to find the saltwater wedge. 9. The team's successful artificial spawning ground installation at Awaruaiti Creek.

Īnanga Spawning Workshop at Kauritutahi Creek

10 APRIL 2024: The Auckland 'Wai Connection' team hosted 13 members of Te Korowai o Papatūānuku team and committee, along with local volunteers, for a full-day Īnanga/whitebait spawning workshop at Kauritutahi Creek, near the northern end of Āwhitu Peninsula. New relationships were formed with Trevor and Lindsey Blackburn, who generously granted stream access from their property.



Introduction to Īnanga

The day began with an introduction to Īnanga, a native whitebait freshwater fish species. Catchment Coordinator Anastasia Zaleta shared a presentation about the Īnanga life cycle, spawning process and preferred habitat – emphasising the importance of identifying, protecting, and restoring spawning grounds to combat declining populations.

Using a Salinity Meter

Participants learned how to use a salinity meter to locate the saltwater wedge, where Īnanga lay their eggs. Through both streamside and kayak approaches, the stratified salt and freshwater layers were demonstrated and a viable spawning ground was identified on the Blackburns' property. At high tide, as measurements were taken, Īnanga could be seen darting through the flooded banks. One participant, excited to share their newfound knowledge, explained to a newcomer how to use the salinity meter and expressed pride at having been able to teach the new skill.

Habitat Assessment Survey

National Īnanga Spawning Programme (NISP) Coordinator, Sarah Dimitrijevic, guided the group through a habitat assessment survey for Īnanga spawning, identifying factors that benefit or hinder egg laying and survival. Across each participant's scoring form, the Kauritutahi Stream site received a perfect score for high quality spawning habitat.

Installing Temporary Artificial Habitats

To enhance sites lacking adequate spawning conditions, the team demonstrated how to install temporary artificial habitats using straw bales. A Ngāti Te Ata Kaitiaki-in-training hammered in the waratahs and wrapped wire around the bales to keep them secure, keeping the correct angle and gap needed for fish access.

Egg Checking Practice

As the tide receded, participants practiced checking for eggs, hoping to find signs of spawning following the recent new moon. Although one keen-eyed participant initially spotted what appeared to be Īnanga eggs, they were later identified as slug eggs. This underscored the challenge of distinguishing between similar-looking eggs. Luckily, Īnanga eggs were confirmed at the next spawning site at Awaruaiti Creek!

Participant Reflections

As the training wrapped up for the day, participants shared highlights and reflections. Many appreciated the hands-on outdoor experience and the wealth of new information about Īnanga. The saltwater wedge survey, unique Īnanga spawning practices, and overall kaitiakitanga practices were particularly well-received.

Future Commitments

As a result of this Īnanga spawning training, and following survey work this season, Te Korowai o Papatūānuku has committed to purchasing technical equipment to support local communities in identifying and restoring Īnanga spawning sites. This commitment will facilitate the identification and restoration of new sites and foster relationships with more landowners, ensuring the ongoing success of the regenerative efforts on the Āwhitu Peninsula.

Next Steps

The next steps are to further engage the Āwhitu community and offer support, education and potential inanga spawning site identification and restoration. Collaboration between Te Korowai o Papatūānuku and 'Wai Connection' will continue, including ongoing inanga spawning surveys in the 2025 season, and broader scale development of strategies to care for freshwater.



To learn more about the Te Korowai o Papatūānuku wider project, or how 'Wai Connection – Tatai Ki Te Wai' is contributing, please contact:

SARAH MANSELL | Āwhitu Peninsula Landcare
Team Manager
landcare@awhitu.org.nz
www.awhitu.org.nz/news/62/42/Te-Korowai-o-Papatuanuku

ANASTASIA ZALETA | Mountains to Sea Conservation Trust
'Wai Connection' Catchment Coordinator
anastasia@mountainstosea.org.nz
www.mountainstosea.org.nz

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