



# Ngā Ringa o Te Auaunga Friends of Oakley Creek

AUTUMN 2025

## Editorial

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A previous version of this editorial complained about the lack of rain and drew your attention to the restoration of two of our flood damaged bridges. One should be careful what one wishes for! In the Easter deluge delivered by ex-cyclone Tam, the newly restored Cradock Street Bridge got washed away again! We can report here that Council is already preparing to repair it.

These past months have been stressful for many of the plants, including some quite mature ones, with so little rain, and the constant hot and dry conditions. Fortunately, in areas such as the Waterview Heritage Area and Waterview Glades, the young plants that were well

mulched while the ground was still moist, are looking very healthy.

This autumn edition has a post-deluge focus. We report on the restoration of two of our flood damaged bridges and highlight some research on the impact of construction earthworks on soil's ability to store water and grow trees – Te Auaunga has been chosen as one of the sites for this research. In our feature articles you will find some interesting information on the German wasp, increasing in numbers with our warmer winters, and meet one of our longest standing volunteers.

Something for everyone. Enjoy!

**Gina Hefferan, Editor**



Photo (above): Cradock Street Bridge washed away in Easter storm

*"We really had a blast of a time. It was awesome to trade the office for the beautiful nature of Oakley Creek. We all left with greater knowledge of weed identification and a few of us left with sore legs. We all thought you had an amazing set up and it was great to meet some of your regulars and newbie volunteers."*

*- Emily Musto, Tātaki*

## Friday Working Bees

**By Wendy John**

At our last few Friday sessions, we have been focusing in areas in the lower creek, including down where the Wairaka Stream (from the spring / puna in Unitec) converges with the main creek. There we have been very productive with regards to clearing weeds. We have also had some extra helping hands, with a team from BNZ one Friday. And at the last working bee in March, we were joined by a team from Tātaki Auckland Unlimited. Having these extra helpers makes such a difference to the amount of work that gets done, and to the conversations that are had along the way.



*Photo (above): Friday team with BNZ volunteers*



*Photo (above): Friday team with Tātaki volunteers*

## Weedbusting

**By Wendy John**

Our fabulous 'weedbusters' Jean, Keith and Alister have been helping Sandra with some very gnarly sites, as well as helping out with the removal of more moth plant at the Richardson Road Wetland site. Great work, team!



*Photo (above): Weedbusters, after a hard session at the Richardson Road Wetland*

# Monthly Working Bees

**By Wendy John**

At our monthly and weekly working bees, with the help from our wonderful volunteers, we have been busy dealing with the ever-persistent bindweed, and various other pesky weeds, using some of these as mulch, where appropriate. This is no mean feat with the plethora of weeds that would love to take over.

One of the problems with the bush along Te Auaunga – Oakley Creek is that it is ‘linear’ – long and narrow and suffers from what is commonly known as the

‘edge effect’, where it is extremely susceptible to weeds invading from surrounding properties, as well as increased exposure to wind, light, heat and/or cold.

However, we are ever optimistic, and with the contribution of so many enthusiastic volunteers we are definitely making progress.

At our recent February and March working bees we focussed on a couple of areas in Harbutt Reserve. The first one being at the west end of the reserve, and in March we put our efforts into clearing an area down by the creek.



Photo (above): Monthly Working Bee volunteers enjoying some of Lou's delicious home baking after a hard morning's work



Photo (above): David 'in the thick of it'

# Corporates and Beyond Volunteers

**By Wendy John**

This year got off to a quiet start on the corporate front, but

things are starting to pick up. We have been joined by teams from BNZ and Tātaki (refer to Friday Working Bees – above), Beca,

two teams from Sysmex, plus a small team from one of our sponsoring organisations – The Collective.



Photo (above): Beca team



Photo (above): Sysmex Team 2



Photo (above): The Collective

# Te Auaunga Partner Community Group Activities

*By Wendy John*

Our local partner groups continue to chip away at their sites.

**Oakley Loop Group** – The ‘Oakley Loop’ area is looking great. We took a small Friday team up to the site, again, at the beginning of March to give the ‘loop locals’ a bit of a helping hand. They did an amazing job of clearing a very challenging area where a heap of cut bamboo had been dropped a number of years back. This included stacking the bamboo and clearing the area of bindweed and madeira vine.

Then the Oakley Loop Group volunteers spent an afternoon

and did a great job of clearing the weeds from the area that has been planted over the past couple of years. The reduction in the amount of bindweed on the site, from the hard work the team has been doing, is very encouraging.



*Photo (above): Ian & Michael, Powell Street*



*Photo (above): Friday Team at Oakley Loop*



*Photo (above): Powell Street post working bee get together*



*Photo (above): Oakley Loop Group*

**Powell Street Sustainable Neighbourhood Group** – Mid-summer saw the Powell Street group back down at their main site at the end of Powell Street, ‘mucking in’. The site is looking amazing – quite the little ‘urban park’. But the weeds never take a break, so there’s always work to be done. And as is the norm with these working bees, we end up with a shared meal, which is always a joyous occasion.

# Outreach Report

By **Sandra Maclean**

I'm delighted to report that we have great plant survival across the Waterview Heritage Area, despite the prolonged dry over the last few months. You can put that down to a lot of volunteer hours bucketing out woodchip mulch – it does work! Our regular volunteers have been joined by several Conservation Volunteers (CVNZ) and Sustainable Coastlines teams – thanks both – it makes it a lot of fun. Sessions now alternate between working downstream along the North-Western Shared Path, where we clear bindweed to keep our natives from getting smothered – or upstream near the cycle-overbridge across Great North Road, where we clear privet, white poplar, ivy, pampas and other invasives. The latter we are getting into shape for planting this winter.

Funding from the Albert-Eden Local Board has supported this mahi and has also allowed us to engage contractors to undertake chainsaw and knapsack spray work. The overbridge gives a great vantage point to see the changes in this area. The purple of the blue morning glory flowers has gone and, with the privet lifted, the surviving native trees now have lots of room to flourish.

The Odyssey House project is progressing really well with lots of hours from volunteers and some



Photo (above): Sustainable Coastlines and our regular Tuesday volunteers at the Waterview Heritage Area



Photo (above): CVNZ at Waterview Heritage Area Jan 2025

from contractors. Thanks to the Whau Local Board for supporting this mahi with funding via the Whau Wildlink.

CVNZ came out for a repeat visit to the creek behind the Mt Roskill Police Station on Stoddard Rd in February. Again – great plant survival at this site after a lot of mulch was dropped.

A lot of my summer work has been moth plant control on private ground. One of the big focus areas has been around Tait Street and the Islamic Centre. It has taken many, many repeat visits to gain access to all the properties, but it has been very rewarding.

This is my second year of control in this area, and it has been supported massively by Jean and Keith, our hardcore weed specialists and also Allan Wolf, both currently and in previous years. These volunteers have also helped out in the Waterview Downs area which has been a very challenging site and remains a work in progress.

Private gardens in Waterview have also been given a lot of hours as we work to create a halo around the Waterview Heritage Area, to protect our beautifully restored bush. If you see moth plant on your street, please talk to your neighbours about it and raise awareness as to how damaging it is to our native biodiversity, including the wildlife.

# Visitors to the Awa

*By Wendy John*

**Unitec community development students** – A group of Unitec community development students joined us on the creek recently. They helped us clear a heap of *Tradescantia* (yes, filled up a huge weed bag) and, in return, we shared some of our experiences as a community organisation, to assist them with their studies. A great synergy! Many thanks to the enthusiastic team.



*Photo (above): Unitec students*



*Photo (above): Unitec students*

**Auckland University students studying on the creek** – A group of geography students recently took a field trip from War Memorial Park down to Alan Wood Reserve, to measure cross sections of the creek at various sites along the way as part of their course work, which will include producing a catchment management plan. It's always exciting to see the creek being used as a research facility.



*Photo (above): Auckland University*



*Photo (above): Auckland University*

**Auckland Tramping Club** – Members of the Auckland Tramping Club enjoyed a brusque stroll along the creek recently. Wendy joined them for a bit to talk about the creek and some of the work that we are doing. Feedback from the club was – *'Thank you for your talk – a gem of packed info, transmitted clearly and swiftly, all questions answered – some before they were asked!'*



*Photo (above): Auckland Tramping Club*

# Contractors

By Wendy John



Photo (above): Treesafe team

**Treesafe** - The Treesafe team were on the creek recently clearing two big old willow trees that had fallen across the creek. They did a great job. And, while this is a task that requires a huge amount of brute strength, it is also a highly technical job that requires a high degree of skill, as well as complete trust amongst the team as they work together.



Photo (above): Before willow removal



Photo (above): After willow removal

**Post Storm Bridge Rebuild** - At long last it is our turn to have some post-storm bridge rebuilds. Recently opened are two of the five bridges that were washed out during the 2023 storms - between Harbutt Reserve and Cradock Street, and from the walkway across to Waterview Downs.



Photo (above): Waterview Downs Bridge rebuild pre-start meeting



Photo (above): Waterview Downs Bridge rebuilding work

The Programmed team did a great job, using as much of the original material as possible. It's always a delight seeing tradespeople honing their craft so beautifully, with real attention to detail, including rounded off edges of the top railings.'



Photo (above): Waterview Downs Bridge rebuilt

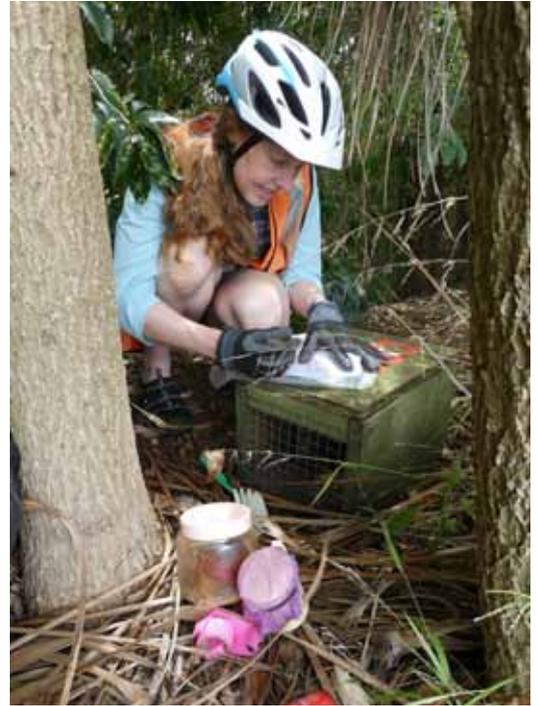
## Predator Control

*By Wendy John*

The late summer rodent baiting pulse is now completed. Maybe it's something to do with the very dry summer, and a shortage of food for the rodents, as a lot of bait was taken compared to recent years. And, the start of a new year is a good time to do a maintenance run of the traps, including calibrating the DOC200 traps.



*Photo (above): John & Alice, Rodent Baiting*



*Photo (above): Rosemary checking and resetting traps*

## Soil Compaction Research

*By Dr Robyn Simcock, Manaaki Whenua Landcare Research (MWLR)*

Did you see three women digging pits, looking closely at the holes and taking soil core samples along Te Auaunga last August? They were soils specialists from Manaaki Whenua Landcare Research and were assessing how much water the soils held and how favourable they were for growing trees. The Ministry for the Environment and Auckland Council funded this work that is helping modellers explore how 'Nature Based Solutions' may help reduce flooding. To do this, we

needed to understand how soil water storage changes when earth-worked and when enhanced.

Te Auaunga catchment is an ideal place to look at urban soil changes as it has a range of natural soils with old and young earth-worked areas (residential developments). Grass, especially kikuyu grass, disguises the soils that lie underneath so excavation was required. Wendy John helped identify areas and different types of earthworks in the parks along Te Auaunga. Her valuable photos showed earthworks in progress, for example construction sites used when the Waterview Shared Path was being built.



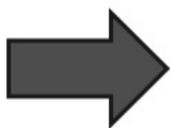
## Harbutt Reserve: 'volcanic' soils



### Near-natural soil



>90 cm rooting depth  
Well drained = never ponds  
High permeability throughout  
High quality soil  
Large, healthy mature trees  
100 mm plant water supply  
245 mm saturated water storage



### Earth-worked soil



35 cm rooting depth  
Poorly drained and flat = winter ponding  
High permeability topsoil over subsoil with low permeability (<4 mm/hr @ 35 cm depth)  
Poor quality soil (shallow, winter w-table 10 cm)  
Struggling young puriri trees (restricted roots)  
32 mm plant water storage (whole profile)  
65 mm saturated water storage (flooded)

Photo (above): Harbutt Reserve volcanic soils

## Findings

Unfortunately, conventional earthworks in Auckland fundamentally alter soils and reduce the water storage by three-quarters on average – from ~200 mm to ~50 mm (the figure, right hand side shows the storage at Harbutt Reserve). The damage is mainly below 20 cm depth and associated with removal, mixing or infilling subsoils with hard-packed gravels and/or highly-compacted subsoils. In some places, earthworks obstructed the underlying free-draining basalt layer, preventing drainage. In nearly all places, earthworks constrained tree growth by restricting root growth, making them highly vulnerable to drought stress. As a result, volunteers have been watering the three puriri planted in the earthworked area in Harbutt Reserve, to keep them alive during the driest summer months.

Not all soils are equal, and even 'natural' soils can benefit from a helping hand. The 'best' natural soils (i.e. not impacted by earthworks) are on the south-east side of Te Auaunga, where volcanic soils (Allophanic Soils) lie on the relatively 'young' basalt lava flows of the Kerikeri Volcanic Group (the figure, left hand side shows the relatively natural soil at Harbutt Reserve). Both the 'natural' deep volcanic soils and deep sedimentary soils hold enough water to absorb very large storms – over 200 mm of water when saturated. However, in winter the sedimentary soils (Ultic Soils) could hold less than half of this amount because of

their poorer drainage. Most of these soils, which developed on Waitemata Formation geology, are on the north-west side of Te Auaunga. Poorly drained soils perform best under actively growing trees as the tree canopy reduces rainfall reaching the soil and tree roots extract water from the soil, freeing space to store rain. Deep leaf litter layers also enhance water storage – the deep humus layer under trees at the Sanctuary Gardens held 11 mm of water when drained, and 40 mm when saturated, further improving these soils. Trees and leaf litter are 'helping hands' that reduce stormwater runoff.

Ministry for the Environment and Auckland Council visited the area in April to see the soils 'face to face'. The soil data is now being used in flood models to work out if and how the changes to soils impact runoff and flooding. We plan to report those findings in the Winter 2025 newsletter. Findings could support a 'deep soils' policy, in which soils capable of supporting healthy trees are preserved during earthworks or renovated and replaced after earthworks.

*External review by Wendy John, Friends of Oakley Creek, and Rachel Devine, Auckland Council*

*MWLR Internal review: Jade Wilson and Jo Cavanagh*

*Uses results and information reported to MfE in the end of 2024 including slides in industry consultation and NZSSS).*

# Margaret's Story

**By Margaret**

*Editor's Note: Margaret was one of our earliest volunteers. She still helps regularly taking care of the young plants in our nursery.*

For me, volunteering with the Oakley Creek Restoration Trust (bravely initiated and maintained by Wendy John all these past years of restoration) filled the gaps where purpose, action and activity needed somewhere to go, and to practise loyalty and perseverance (though, in my case, sometimes with a lot of loud swearing when the terrain was a challenge.)

I started volunteering at Meola Reef Reserve when it was first being restored. I got used to being seen with spade in hand. I feared "people" would think I was mad! So, Oakley Creek was in the "Happening This Week" section of the Central Leader weekly paper. Went along - tugged and clipped asparagus weed from trees. Went along when the Department of Conservation person - Alica - GPSd the 100 metre distance points along the walkway. We learnt to set out print cards in tunnels and rebait stations (sorry, animals). Work happened monthly and, of course, still does, with a much wider community of volunteers, because the Trust (Wendy John) reached out to schools, pre-schools, Auckland Council, Watercare, businesses who had staff environmental days, and probably more.



*Photo (above): Margaret planting (Kennedy Warne)*

It's like being in a team or a class, where people have a place, a function and also the sort of freedom to opt out sometimes or change role or place; and there's also a "making way" for new people who, hopefully, will take their planting, baiting experience back to where they live. Oakley Creek also let me find initiative (thank you, Wendy, sometimes I did stuff just for me) like deciding to get a net on a pole and do litter pick-ups like other people do now.

I'm just lucky to have read the newspaper on a certain day, to live in a certain place with a particular creek.

Thank you all.

# Vespula Germanica – Predator Par Excellence

By **Marin Adams**

Sometimes restoration work comes with a sting in the tail. For me, it was other parts of my anatomy as well. German wasps rose in a swarm as I pulled out a clump of cocksfoot that had disguised the entrance to their nest. They followed me as I stumbled up the hill. I discarded my shirt as they stung through the fabric again and again. What to do? How to stop them? Maybe the pool or a cold shower? Under water would be good. Ah, success, the stinging stopped, and the pain temporarily went away. I rose from the pool, my clothes now waspless but wet through. I was lucky to survive the attack. Someone with an allergy would not have been so lucky.

The banks above the awa are a prime spot for wasps to excavate a nest and raise their brood. It is also a location where we humans weed, plant out native seedlings and trap predators. Should we be sharing the space or should we help exterminate another species that love to live beside the creek?



Photo (above): The German Wasp (Martin Grimm) Copied from Urban Ark website

What you and I don't see is the wasp gathering its food. Wasps kill by stinging their prey to death. They attack newly hatched birds, nestling birds, caterpillars and insects. They also gather honey dew and so compete with tui for a valuable source of carbs. Wasps are not often identified as predators but, in fact, they are.

Some interesting facts about *Vespula Germanica*:

- The German wasp was accidentally introduced into New Zealand in the 1940s.
- New Zealand has some of the highest densities of German wasps in the world. This is because they have no natural predators here, our winters are mild and there is plenty of food for them. The wasps can survive a mild winter in New Zealand whereas, in Northern Europe, every nest dies.
- The average wasp nest produces 1000-2000 queens a year. In autumn, these queens flee the nest, mate and then hunker down for winter, when most wasp nests die. She uses stored sperm to fertilise eggs for a new nest when she wakes up in the spring.
- Social wasps live as colonies in nests of honeycomb-like cells. They form complex social groups and all members of a colony help raise the young.



Photo (above): Edwin Ainley, Te Ngahere, dealing with a German wasp nest

- The world's largest recorded wasp nest was discovered at Waimauku. It was 3.75 metres tall and 1.7 metres wide.

Will you help reduce the numbers of this predator and so protect our native birds and insects? Setting up traps can be done in your own home environment.

- Contact Urban Ark – Manawa Taiao. See their website in Reference number 4 below.

## References:

1. <https://www.doc.govt.nz/nature/pests-and-threats/animal-pests-and-threats/wasps/>
2. <https://inaturalist.nz/taxa/126155-Vespula-germanica>
3. <https://predatorfreenz.org/stories/things-you-should-know/buzz-off-7-facts-about-wasps/>
4. <https://urbanark.nz/get-involved/remove-predators/wasps/>

# Wai Care – Water monitoring in Te Auaunga, Harbutt Reserve

**By Teresa Ma, Conservation Volunteers New Zealand (CVNZ)**

On Saturday, March 22<sup>nd</sup> – World Water Day, we welcomed 15 international volunteers from Nepal, Chile, Japan, China, the U.S. and the U.K, along with local residents, to join our Wai Care water monitoring session at Te Auaunga – Oakley Creek. This event, part of ECOFEST and supported by the Wai Care Programme, was a multilingual experience aimed at engaging people of all ages in the health of our waterways.



*Photo (above): World Water Day*

Wai Care is a citizen science initiative that connects communities with local streams, promoting awareness and action to improve water quality. Volunteers were provided with detailed guidance on how to assess stream health. Teresina Robredo De la Vega from Auckland Council, Wendy John from Friends of Oakley Creek, and Teresa Ma from CVNZ guided the participants through the process in Spanish, English and Chinese respectively.

The session involved testing both the physical and chemical parameters of the water, as well as assessing biological indicators such as macroinvertebrates. It also covered facts about the stream's ecosystem.



*Photo (above): World Water Day monitoring*

Volunteers were fascinated by how the water samples changed colour when mixed with the various chemical reagents, indicating the levels of pH, nitrate, dissolved oxygen (DO) and phosphate in the water. They also learnt about the damselfly's life cycle, discovering how its larvae live underwater before becoming land predators. And they were fortunate enough to see two longfin eels!

This event not only enhanced the participants understanding of aquatic life, but also helped to foster a sense of community responsibility for protecting our waterways.



*Photo (above): World Water Day monitoring*

## Seasonal gallery

This is the fruit of the kohekohe (*Didymocheton spectabilis*) which we gather on the awa each autumn. Kohekohe is cauliflorous, its flowers and fruit grow directly from the trunk or branches, a feature more commonly associated with trees growing in the tropics.

Other sightings on the creek include houhere (*Hoheria populnea*) in flower, pūriri (*Vitex Lucens*) berries, kahikatea (*Dacrycarpus dacrydioides*) fruit and seeds, an elegant white-faced heron wading in the awa and a large vagrant spider (*Genus Uliodon*).



Photo (above): Kohekohe (*Didymocheton spectabilis*) fruit



Photo (above): From left to right, clockwise: Houhere flowers, pūriri berries, kahikatea fruit and seeds, white-faced heron and vagrant spider

## Can we improve cities for people and biodiversity?

Professor Margaret Stanley is an ecologist at the University of Auckland specialising in invasive species and urban ecology research. She has kindly accepted an invitation to speak at our **Annual General Meeting** to be held at Ferndale House at 7pm on **Monday 9<sup>th</sup> June**.

Margaret will talk about the impacts of urban development and people on

biodiversity in cities, from city-scale impacts, such as tree removal and light pollution, to invasive species spilling out of our backyards. She'll give some useful tips on ways we can make our backyards better homes for wildlife and how we can make city spaces biodiversity-friendly.

Note your diaries!

## Notices

**Monthly Community Working Bees:** As per normal, our monthly working bees are held on the first Sunday of each month – 10.00am-12.00noon.

**Tuesday Working Bees:** Tuesday mornings 9.30am to 12.00pm. This exciting project is looking for some more regular volunteers. For more information contact Sandra - 021 166 7647.

**Friday Working Bees:** Friday mornings 9.00am to 12.00pm. We work in different locations on Friday mornings, depending on the need at the time. If you're interested let us know and we'll include you in the Friday email list so that you can join us when you are free, or contact Wendy – 027 232 6454.

### Volunteer Positions:

**Secretary** - we are still needing a secretary. The role requires an eye for detail and an ability to attend (online or in person) committee meetings on the second Monday of each month. A good knowledge or experience of committee procedures would be helpful but not essential. We have an enthusiastic committee who will support you in every way possible. If this interests you, please contact David Bowden (Chairperson) on 027 249 1873, Wendy John – 027 232 6454 or email [info@oakleycreek.org.nz](mailto:info@oakleycreek.org.nz) for further information.

**Predator Control** - if you are interested in joining our predator control team we are needing a volunteer to assist with this. Training and resources are provided – contact Wendy – [info@oakleycreek.org.nz](mailto:info@oakleycreek.org.nz)

# Ngā Ringa o Te Auaunga Friends of Oakley Creek

**Chairperson:**

David Bowden

**Treasurer:**

Matthew Hill

**Secretary:**

TBC

**Committee:**

Adrienne Stanton, Cate Ryan, Chris Brown, John Stevenson, Marin Adams, Wendy John.

**Newsletter Editor:** Gina Hefferan



**Newsletter Photos:** Unless otherwise credited, all photos are by Wendy John

Newsletter contributions and comments are welcome - email [info@oakleycreek.org.nz](mailto:info@oakleycreek.org.nz)

We welcome more members (\$10.00) and/or donations towards the work we are doing to protect and restore our wonderful urban 'taonga' - Te Auaunga Oakley Creek. Donations over \$5.00 are tax deductible.

Contributions can be made directly; our bank account number is 38-9003-0978224-00.

You can also find us at <http://oakleycreek.org.nz/> and <https://www.facebook.com/OakleyCreek>

We gratefully acknowledge the support of Foundation North, The Trusts Community Foundation, the Collective, Robert C Bruce Charitable Trust, Auckland Council, Albert-Eden, Puketāpapa and Whau Local Boards, The Trust and the Community Organisation Grants Scheme (COGS).

