The Inlet

Newsletter for Guardians of Pāuatahanui Inlet

DECEMBER 2025

The Inlet is a newsletter that brings together local and regional news affecting the Pāuatahanui Inlet and its environs.

The Inlet comes out three times a year and current or back issues can be downloaded from our website.

The newsletter includes items of concern that affect the area as well as general interest topics for everyone.

Please contact us if you would like to contribute to The Inlet.

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www.gopi.org.nz

Inside this issue:

FROM THE CHAIR

It's been a busy year. During the year we:

Ran the Inlet Clean-up in March;

Confirmed a new Constitution and a Strategic Direction for GOPI at a Special General Meeting in March. The Strategic Direction included collaborating more with like-minded organisations on joint initiatives that help the Inlet;

Produced our highly regarded newsletters, *The Inlet* - this time with Feature Articles on invertebrates in the Inlet for the April and August editions;

Developed the extent and currency of content in our website and through our Facebook channel;

Appointed two new committee members, Judi Jones and Grenville Gaskell, at our AGM in June, and had an interesting presentation on the Transmission Gully Motorway and the mountains of work yet to completed for this troubled project;

Managed a successful planting day at Ivey Bay in June;

Supported Inlet planting work by Plimmerton Rotary;

Continued our work on trapping predators around the Inlet;

Started filming an initial video production on the *Wai Ora - Living Waters* video series;

Made a number of submissions to the Government on environmental legislation;

Participated in workshops organised by Ngāti Toa and designed to advance the Harbour Accord - which was agreed among Ngāti Toa, local authority and other agencies on Waitangi Day.

Ran the triennial Cockle Survey in November (see the article below on page 3);

Provided submissions on plans and proposals by Porirua City and Greater Wellington Regional Councils, and maintained key contacts with councils and councillors, Wellington Water, Ngāti Toa and fellow environmental organisations.

One of the major disappointments during the year was the continuing erosion of

From the Chair cont...

environmental legislation and related standards and of regional governance. In this regard:

The Fast Track legislation allowed for accelerated resource consents but at the price of excluding community groups such as GOPI from these often significant major projects.

Changes were proposed to Freshwater Standards which we considered unacceptable.

The Government effectively told Greater Wellington Regional Council to stop the hearings on the changes to its Natural Resources Plan, changes that would set standards for much better management of water quality.

On top of this, proposals were recently made to abolish regional councils and replace them with a collective governance system made up of local mayors.

The latest development in this environmental-legislation reset was the advent of two new and separate Resource Management Bills: a Planning Bill that has a strong property-rights emphasis and is designed to 'enable development and regulate how land is used', and a Natural Environment Bill that covers water, air and pollution issues and is designed to 'manage the impacts from the use of natural resources and protect the natural environment from harm'. But the combined system also seems to include more possibilities of trade-offs where environmental and development objectives coincide and there is a likely provision which could require local authorities to compensate land owners if environmentally-based restrictions (such as protecting 'matters high in natural character') are applied.

The Government sees both bills as reducing complexity by having many fewer plans, zones and consent requirements, thus speeding up resource consents. The new system will rely on national standards and policies and nationally specified types-of-land-use zones. Oddly perhaps, and despite aiming to possibly eliminate regional councils, the proposed system relies on regional-scale land use and natural environmental management plans and, hopefully, integration between the two systems as well as incorporating long-needed spatial planning. Exactly how this mix will be managed is as yet unclear.

So, next year it looks like we, together with our partner organisation the *Porirua Harbour Trust*, will need to spend yet more time making submissions on this significant and, in parts, worrying change to environmental management.

On a positive note, next year may provide a welcome move to enhance harbour and catchment quality. The development of the *Harbour Accord* is likely to set a platform for making a much needed positive difference to the harbour and Inlet ecosystems. Credit needs to be given to Ngāti Toa, and especially to Robert McClean and Ashleigh Sagar, who have managed a series of workshops on harbour issues and are developing a set of targets and measures for the *Harbour Accord*. This work sets a most desirable and crucial direction for the *Accord*.

In conclusion, I thank GOPI Committee members for all their work over the year and especially the mountains of effort in organising the Cockle Survey. And thank you to our members for your support and help with our many activities.

Season's Greetings to you all.

Lindsay Gow
Chairperson

2025 COCKLE SURVEY

Since the last newsletter in August we have had our most important activity of the year - the triennial Cockle Survey of Pāuatahanui Inlet. This was the twelfth cockle survey we have done since the creation of GOPI.

The date of the survey this year was 2 November and, partly due to intensive advertising with posters, promotional activities by the organising committee and placements on our Facebook page and website, we had a good turnout that totalled around 120 volunteers (including 10 children) who took part in the various activities of the day. There were of course the actual teams that trudge all around the harbour shore to do the counting, as well as those manning our base at the Reserve. We had a full complement of 30+ team leaders, many from GWRC with a good deal of previous experience.

It was great to welcome back regulars who have done this before but also to meet new GOPI members and representatives of the wider community who have not been involved with the Guardians in the past. We want to give a big thank-you to all the local and not-so-local contributors who took part in the event.

Overall, it was voted a great day. The weather gods were with us and the rain held off, although we were not so fortunate with the wind which had people chasing buckets and ice-cream tubs around the Inlet and across streams. Keeping the paperwork in place was also a big challenge when trying to record each individual shellfish against the table of sizes between two and fifty millimeters. But everyone managed pretty well.

The turnout allowed us to tackle most of the 30 transects with the exception of the three that didn't see the water level fall below the lower mid-tide mark. There is always some variation in shoreline profiles from year to year that make tide levels unpredictable. In addition, some teams didn't get to complete the high-tide level sampling on the day as we recommended to all that, if not finished by 4pm, everyone should pack up and get back to base so they could enjoy the sausage sizzle before it all disappeared.

With plenty of planning by a new organising sub-committee for the survey, subtle changes had been made to previous years' procedures aiding, in particular, the task of sieving the sediments to find the cockles. A newly designed, purpose-built sieve was provided for all transects and this helped to achieve a more efficient counting process. General consensus was that the new sieves were a huge success. In addition we have also had lots of other feedback with ideas for making the process even smoother and these will be addressed at a sub-committee meeting.

To give some statistics, there are 360 sample sites around the Inlet. In this survey however 381 samples were collected overall, with 271 recorded on survey day and 110 samples of unfinished and re-sampled sites completed in the following days. This follow-up sampling was a lot of extra work for the GOPI team and its helpers but necessary to produce a comprehensive set of data for the analysis to be completed.

All told 18,669 cockles were measured and counted, of which 22% were juveniles at under 10mm in size. This compares with the 2022 survey (covering transects 1-27) when the total number of cockles counted was higher by 2,605 while the percentage of juveniles was down by 3%.

HEADING

Cockle Survey cont...

Compilation of the raw data has now been completed and the total results forwarded to NIWA (the National Institute of Water and Atmospheric Research which is now part of *Earth Sciences New Zealand*) for scientific analysis and the final survey report, usually published in March. This is always eagerly awaited to see how the population of cockles has changed over the past three years, and to look at the overall trend in the density of this most important indicator species for the Inlet.

When we receive the final report it will be posted onto our website.

Thank you to everyone who provided feedback, photos and a video, and to Paremata Auto Services for their wonderful sponsorship of the event. Special thanks are due to Jo Fagan and the staff of GWRC without whom it would not have happened, and to those who came forward after the day, particularly Paul Breen, to help with the samples that had not been achieved on the day.

During the day a video was created that covers most of the activities. It's available on our website but can be viewed here from this digital newsletter copy.

A photographic record of the day's activities follows.

Entrance to the Reserve on the day of the survey. With all our advertising and published information some new visitors still had difficulty in finding us.

Photo: Helen Kettles

Outside Stout Cottage John McKoy welcomes the team leaders and sampling procedures are explained by Warrick Lyon.

Photo: Helen Kettles

Team Leaders gather together for the talk about sampling procedures prior to the arrival of the public volunteers.

Photo Helen Kettles

Cockle Survey cont...

The sample kits are laid out in transect order for team leaders to stand by and gather the teams together.

Photo: Michael Waldron

Reception desk. Volunteers are registered and allocated a transect as they arrive. The desk is manned by Christine Stanley and Grenville Gaskell.

Photo: Ray Ryan

Transect 16. Greg and Claudia Eustace. Each team sets up their sampling stations at the high tide mark.

Photo: Helen Kettles

Transect 22. Christine Jacobson explains the procedure with Dene Carroll and his two daughters, Ella and Emily.

Photo: Deb Anthony

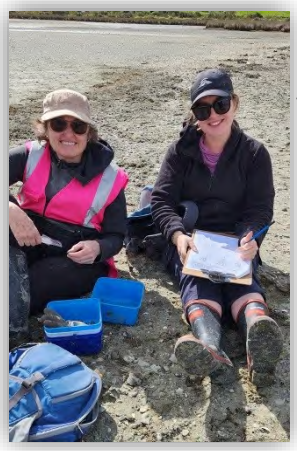
Transect 23. Dave & Brenda Lazelle. The sampling begins by digging out the sediment from within a quadrat.

Photo: J Young

Cockle Survey cont...

Transect 16. Claudia Eustace.
Sieving can seem a very lonely activity at times.

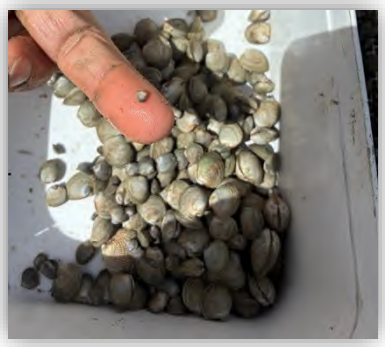
Photo: Helen Kettles



Transect 16. Helen Kettles and Claudia Eustace.
Counting and measuring.
So.....who said this was a tough assignment?

Photo: Greg Eustace

Transect 16. Counting cockles, both large and small.
Photo: Helen Kettles



And, at the end of the day, a tasty sausage sizzle courtesy of Janet and Ray Ryan with the generous contribution of Paremata Auto Services.
Lindsay Gow is checking if there are any left!

Photo: Ray Ryan

Alexander Waldron and Cam Feast pose for the final photo.

Photo: Ray Ryan

FEATURE ARTICLE

This article is about Taupō Swamp, a freshwater wetland located just north of Plimmerton. It's a narrow river course that covers an area of about 53 hectares forming the lower reaches of the Taupō Valley. This swamp has become a focus of attention in recent years due to the activities of a group of enthusiasts, the Friends of Taupō Swamp and Catchment (FOTSC), formed in 2018. This group is working hard to restore the wetland to as natural a state as possible after many years of neglect and associated industrial and commercial activity. While not a part of Pāuatahanui Inlet, the history of Taupō Swamp, and the environmental concerns surrounding it, is a very topical subject, given the threats facing its function as an ecosystem, namely sustaining the quality of water entering the harbour at Plimmerton beach.

Taupō Swamp

Part One History


Photo: QEII National Trust

Visible on the left of SH59 (formerly SH1), this swampy landscape is well known to Wellingtonians and the communities that live north of the capital. How it came to be there, however, may not be so well understood.

Going back in time, the geology of the Wellington region is, in general, underlain by Mesozoic rocks known as greywacke, the same hard sandstone rock system that forms parts of the Southern Alps. These rocks were laid down some 230 million years ago (mya) off the east coast of the Gondwana supercontinent, as deep-sea sediments fed by rivers from an ancient eroding land. Then, as the Tasman Sea began to open 85mya, a section of Earth's crust carried this block of sediments, now hardened by long compression, eastward into the Pacific. Over millions of years, tectonic crustal movements forced the region to be uplifted above sea level to form the hills and mountains of New Zealand. The lower North Island hills became the Rimutakas and Tararuas. Exposed to the climatic elements of wind and rain, and the eventual vegetative cover of a thick forest, these uplands areas became dissected by streams into a network of valleys, some along fault lines, and others along softer sediment cover. One of the latter was the Taupō valley, fed by a stream of the same name.

During the Ice Age, when sea levels were 30m lower than they are today, the Taupō Stream would have been a tributary of a much more extensive river system that reached the sea beyond Mana Island. At the end of the last cold phase, around 10,000 years ago, much of the river valley was gradually submerged to form a natural harbour, fed by the remnant Pāuatahanui and Porirua Streams. The lower reaches of the Taupō Stream opened into a lagoon, a small inlet at the entrance to what is now Porirua Harbour.

Then, over a period of around 3,000 years, a series of earthquakes gradually uplifted the seabed of Porirua Harbour, culminating in the famous Wairarapa earthquake of 1855. These movements slowly changed the lagoon from a marine inlet into an increasingly freshwater wetland, with an accumulating, oxygen-

Feature Article cont...

depleted, peat bog. The 1855 event is generally thought to have contributed to the final closure from the sea and from that point onwards, siltation gradually transformed the valley into what is now regarded as a *topogenous mire*, a wetland area where a topographical barrier prevents free drainage.

That is how Taupō Swamp developed, building up ever-thicker deposits of silt, during which time a community of wetland plants formed, their decaying roots, stems and leaves adding to the increasing peatland.

Taupō Stream still follows the old river valley from the hills south of Pukerua Bay, finally reaching Plimmerton where an artificially created watercourse flows under the railway at Steyne Avenue. The northern boundary of the swamp is at Airlie Road and its southern limit is at the Plimmerton Domain. At its lower reaches, ocean beach deposits can still be found while, higher up, there are river and lake deposits. These date mostly from around 11,000 years ago, left behind after the last Ice Age retreat, but some earlier Pleistocene Ice Age deposits can still be found in places.

The outline of the original lagoon can still be seen in a topographical map of the area. It forms the low-lying land between the railway line to the west and the hills to the east which are being developed into the Plimmerton Farm Urban-growth area. It meets the sea between Taupō Point, where the fire station is located, and Goat Point at the base of Camborne's rocky outcrop.

Topographical map of Plimmerton showing the extent of Taupō Swamp.
(© Sourced from NZTopo Database. Crown Copyright Reserved)

The Taupō valley is, in human terms, an ancestral landscape. It, and the surrounding lands, are one of the oldest recorded sites of continuous occupation in the Wellington region. Many different Māori tribes have dwelt adjoining to the wetland and accessed the land and sea resources for food and customary materials.

Feature Article cont…

For Ngāti Toa Rangatira, who arrived from Kawhia in the 1820s, Taupō continued to be a customary fishing area and a valued forest resource. The wetland is adjacent to a number of pā sites and other significant locations including Taupō Pā, urupā and Taua Tapu track. The area formed part of the Porirua reserve lands set aside by Governor Grey for Ngāti Toa Rangatira in 1847.

Following the establishment of the Native Land Court in 1865, and the arrival of the Wellington-Manawatū railway in the 1880s which skirted the western hills, most of the original reserve land containing Taupō wetland was alienated from the iwi and vested in various settlers who removed the original indigenous forests and vegetation for pastoral farming. This in turn resulted in much increased sedimentation from the Taupō Valley catchment.

View of the mainline rail link that passes Taupō Swamp. Photo: Michael Waldron

For Māori, seasonal work on the farms became an important way to maintain the values and connections with the land. Ngāti Toa Rangatira were well known shearers in the area and maintained close relationships with the original farm stations such as the Grays and Walkers.

With the development of a significant natural flax habitat, commercial interests turned to exploiting the flax for a burgeoning industry, based in Foxton. By the late 1800s, cropping was increased by adding exotic plants and the harvesting continued until the mid-1900s.

In the early 20th century, Taupō Swamp was seen as a potential landscape for farming and attempts were made to drain it. This proved largely unsuccessful, however, due to the constantly high water table. The exception was the southern parts of the valley and in the 1930s these drained areas were used to establish the Plimmerton Domain, and later, in 1946, Winstone's ceramic pipe and tile factory.

1936 saw the start of construction of the Centennial Highway from Paremata to Pukerua Bay along the eastern perimeter of the swamp. Both the railway and the new road largely avoided the peaty soils of the wetland but both infrastructures resulted in some smaller branches of the swamp becoming isolated.

Eventually, the otherwise disregarded swamp began to be recognised for its value as an important wetland and recreational area and there developed a desire to protect the rare community of plants and animals that lived there. The northern part of the swamp was afforded full protection from further encroachment with the purchase of about 30ha by the QEII National Trust in 1986. This was supported by the Wellington Regional Council, Porirua City Council, Royal Forest & Bird Protection Society and others, with the aim of both protecting and restoring the wetland. The Trust was delighted to host Her Majesty the Queen and Prince Philip at Taupō Swamp during their visit to New Zealand in February that year, enabling them to see the Trust's work at first-hand.

Twelve hectares of the remaining lower reaches are still held by Porirua City and part of that has been developed as a commercial base for a number of businesses along Ulric Street. Finally, small areas are set aside as road and rail reserve, and a small amount is in private ownership.

In 2018, after mounting community concern about the huge weed infestation of the remaining lower wetland area, *Friends of Taupō Swamp & Catchment* (FOTSC) was formed to set about actively transforming the mixed habitat of these lower reaches back to its natural state.

Working alongside Mana Whenua, GW, PCC and community groups, FOTSC has an ongoing active

Feature Article cont…

programme of protection, restoration and enhancement of the biodiversity of the lower wetland system and an advocacy role for the wider catchment.

The natural history of the swamp and the work that FOTSC is doing, with its vision for the future and the threats that are casting shadows on this future, will be covered in the second part of this feature article in the next newsletter.

ON THE HORIZON

Inlet Clean-up.

Looking towards the New Year we are expecting to run the next annual Inlet Clean-up on 8 March 2026.

Restoration Planting

We are hoping to conduct further planting sessions during 2026 and recommend you check in on our website regularly to keep tabs on news of these events as well as updates to the site's content that happens periodically. (www.gopi.org.nz)

PLEASE SIGN UP A FRIEND OR NEIGHBOUR

Sign up a neighbour, friend, or another family member. Just explain to them that membership numbers really count in giving us a strong voice to argue for what we all value about the Inlet.

On the back page of this newsletter is our Membership Form which can be filled in and emailed to us at pauainlet@gmail.com. Also, you can forward this newsletter to someone else with just a note encouraging them to join.

Alternatively, you can visit our website where we have an on-line Membership Form which can be submitted directly from the site gopi.org.nz/join-us

EMERGENCY NUMBERS FOR THE PĀUATAHANUI INLET

Pollution: Discharges of contaminants to air, land, storm-water drains, streams, rivers or sea and for after hours consent enquiries: Greater Wellington Regional Council – 0800 496 734 (24 hours)

Boating infringements: Greater Wellington Regional Council – 384 5708 (24 hours)

Illegal fishing activity: Ministry for Primary Industries – 0800 476 224 (24 hours)

Pāuatahanui Wildlife Reserve: Department of Conservation – 0800 362 468

Let us know what you have reported so we can keep an accurate record and follow up if necessary.

235 5052 (Chair, GOPI) or ***pauainlet@gmail.com*.**