

## Nau Mai, Haere mai

As the days become noticeably shorter and the leaves transition through a rainbow of colours we become aware that Ngahuru/Autumn is upon us. A chill creeps into the air and we begin our process of preparing for colder darker days – it is a time known for abundance as many fruits and vegetables are ready for harvest.

At Waikawa Bay School and Linkwater School in their Kids Edible Gardens this is exactly what they will be doing. In this term's GREENchat we acknowledge the mahi of these two schools, we also celebrate the Fresh Water Zui, Seaweek and Chinese New Year celebrations, Cyclone Gabrielle flood relief at Renwick Kindergarten and our new Coffee and Cake workshops.

We have also included a new feature – Community Spotlight. Each term we will spotlight a community group or organisation that you might like to connect with. If someone you know would like to feature in here, please let us know.

Ramona, Angela and Annie

### Waikawa Bay School

The first few weeks of each new year in the Kids Edible Gardens is spent tidying, weeding and cleaning up the garden beds after 6 weeks of being left to fend for itself. It is also quite an exciting time as the students uncover treasures of fruit and vegetables waiting to be harvested.

As they worked, the students at Waikawa Bay school took time to reflect on last year's successes; term 4 turned out to be one of their most successful growing and harvesting seasons. They put it down to all the rain and using some really good compost!

The children harvested cauliflower, spinach, lettuces, sugar snap peas, broad beans, radishes, celery, leeks, garlic, and some lovely potatoes in time for Christmas.

Growing garlic was a highlight and particularly valuable learning experience for the children as they followed the process of saving bulbs from the previous year for replanting. This included planting, growing and caring for the crop through to harvesting and drying their bulbs ready for eating. They also discovered how they could easily multiply their crop and still have plenty for a year's worth of garlic.

Staking their tomatoes and cucumbers and removing laterals from their tomatoes gave pollinating insects the best opportunity to visit the flowers and sunlight to reach all parts of the plant for photosynthesis and ripening fruit. They are now harvesting a bounty of tomatoes and cucumbers as well as zucchini, corn, basil, and lettuce. Their pumpkins still have a little way to go, but they are confident that their trial of planting companion sunflowers alongside them will prove to be a winner.





## Linkwater School

Summer is a favourite time in the Kids Edible gardens for all students. The gardens are a classroom for all learning across all curriculum areas and it is far nicer to be outside than in.

Water conservation is an important aspect of gardening in the summer. Although our summer has been wetter than normal the children at Linkwater School wanted to ensure their water wasn't wasted and was reaching the roots where it is needed most. They discovered Olla Pots, a traditional Italian irrigation method, and set about making two for their gardens.

Olla (pronounced 'oi ya') pots are made of unglazed terracotta and were used by the Romans for storing food and for cooking. They can also be filled with water as a means of irrigation to keep the soil moist. Water seeps through the pores of the unglazed terracotta into the soil. Less water is used as none runs off or evaporates. Some gardeners report using 50–70% less water. If you would like to give it a try, take a look at this quick video.

<https://www.abc.net.au/gardening/factsheets/olla-watering-pots/11988902>

Just as important is feeding the soil so that the plants have nutrients available to grow and produce crops to harvest.

A quick, easy, if not smelly way, to make your own fertiliser is to make what the children call a smelly brew. Using weeds from the garden, they are placed in a bucket with a well-fitting lid and soaked in water for a week or two. The children discovered opening the bucket outside in the garden is the best place. Once opened they dilute the brew with more water in their watering cans before giving to their quick growing and hungry vegetables.

And it's paying off – here is a sample of what they harvested this week.



### **Funds for planting projects**

This year we have access to some funds through EnviroSchools from the 1 Billion Trees Fund. We have successfully applied for \$2000 for our region so if you have a planting project and require funds for native trees we can help.

EnviroSchools asks that "Funds be used to support ecological restoration projects and provide hands-on learning experiences for students, showcasing the value of a holistic approach."

There are some criteria we need to meet to release the funds which mainly involves a paragraph with an overview of what you will be doing and why then taking photos and writing us a short story on what was achieved.

If you are interested contact for more information [annie.mcdonald@marlborough.govt.nz](mailto:annie.mcdonald@marlborough.govt.nz)

## Waitohi Kindergarten celebrate Kaupapa Moana | Seaweek

Waitohi Kindergarten had an action packed week learning all about te moana (the ocean). With a theme for each day they ensured they covered a wide range of experiences. Starting with a fun Dress up and Crafts day, followed up by Nude Food day. This included making Beeswax wraps that the tamariki all got to take home.

Wednesday was Marine Mammal day and they had a special guest, Tash. She not only shared her knowledge at mat time but also an experience in the sandpit for the tamariki (children) to help save an orca. Kaimoana day was on Thursday and they were kindly donated fresh fish from Ameer and Hayden. And finally Rock Pool day on Friday. For some of the tamariki this involved a trip to Shakespeare Bay with Waikawa Bay School to do a beach clean up. While the others got to explore under water with a mask. Flowing through the whole week they also held a rubbish competition. Each child brought in a t-shirt that was repurposed into a bag and then taken home for collecting rubbish in. The rubbish was then brought back into Kindergarten for display. With so much support from whānau the learning at kindergarten was taken home and out into the community. I am sure that Tangaroa will be very appreciative of all the mahi that you achieved during Kaupapa Moana and the ongoing effort the tamariki are doing to keep the ocean clean.



## Renwick Kindergarten reach out to the wider community

Cyclone Gabrielle Flood Relief: After the devastating cyclone that hit Te Ika a Māui in February this year, Renwick Kindergarten had a discussion with their Whānau Group Leader (one of their mum's) and came up with the idea of pooling their resources and contacts and collecting desperately needed clothing, bedding, personal items and food to send up to the worst hit areas in rural Gisborne and Napier on the East Coast. Contact was made with Smedley where things were going to be delivered then distributed via plane, helicopter and 4-wheel drive. They had an overwhelming response of support from their kindergarten whānau, as well as local businesses. Together with their knowledge of sustainability, and kaupapa of manaakitanga, their little Kindergarten community got busy washing and cleaning items and disused clothing and purchasing non-perishable food. 206 ANZAC bikkies were baked at Kindergarten, countless cards of awhi and support from the tamariki and 2 horse trucks later, the emails, letters and messages on social media came rolling in, thanking the Renwick Kindergarten whānau for their generosity and how much the manaaki and aroha they sent, ment to them in their darkest hours. Renwick Kindergarten aspires every day to be *involved in our community, honoring and celebrating the diversity of people within it*, even if this means their community can make a difference 440.5 km away.

## Nī hāo ma and Happy Chinese New Year!

Earlier this term at Seymour Kindergarten they learnt about the origins of the Chinese New Year. They also learnt about Nian and how the villagers scared him away with red banners and firecrackers. As apart of this learning nga tamariki made lanterns and hand print dragons to decorate the Kindergarten. They also made their own dancing Dragon and Lion. The felt honoured to have Mandy and Alice from our local Chinese community come in and support their learning about Chinese New Year. Mandy told them a story about the Chinese Zodiac and how each animal had to race to be named one of the twelve signs. They presented Mandy and Alice with a Dragon dance featuring their dragon which Avryl and nga tamariki had been working on. Each tamariki received a tradition gift of a mandarin which represents Da` Ji -Good Fortune.





# ENVIROGROUP ZUI - Freshwater Systems

The first of this year's Envirogroup Zui took place on the 2<sup>nd</sup> of March.

The focus of this Zui was on our freshwater systems. Here in Wairau, we are lucky to have lots of wai around us – sea, rivers, wetlands, and lakes.

We all relate to water; it is one of the first things we name when we introduce ourselves and our connections with places important to us in our pepeha

For some of us it is the place we want to go to relax and have fun outdoors.

The students discovered that of all the wai on earth, only 3 % is freshwater. They all knew that wai is important to life for us as a source of drinking water but we dug a little deeper and brainstormed how else is freshwater used in our community – who and what uses freshwater in Wairau?

We will have spent some of our holidays in or near the water. Apart from having fun, swimming, fishing, camping .....

**Who or what else uses water in Marlborough?  
How do they use it?**

The word cloud includes the following items:

- Our dogs like swimming in it
- Food crops
- Swimming Lessons
- business
- everything
- fish
- Pets
- Whitebaiting
- Animals
- Cats
- plants, food, insects
- farm animals
- Cafes

Marlborough District Council is taking submissions on the way they manage our freshwater waterways. One way of empowering our students is giving them the opportunity to voice their thoughts, ideas and perspectives on important issues such as this.

We had Sarah Brand, who is working on the submission, join us. She asked the students

- how they use our freshwater spaces
- what they valued about them
- how they would see them in the future

so that they could contribute to the submission.

We then moved onto how much of wai is used in Wairau. It was a surprise to most that on average each household uses around 700 litres of water each day – 350 2L bottles of milk.

In the summer this can increase to up to 1500 litres of water each day and much of this goes down the drain or onto our gardens. 55 bottles of milk is estimated to be used when we shower or bathe and another 55 bottles flushing the toilet each day. 140 bottles of milk are used in the kitchen and laundry.

It was even more surprising when we compared our water use to that of people in parts of India and Africa where there is not a piped water supply. Their water use was only 25 litres of water per day, due to the fact they have to carry water back to their homes from the local water supply.

We ended with a quick list of ways the students could explore more about freshwater in their school, their community or around the motu. If there is anything on the list, or another aspect of wai entirely, that you think your students would be interested in learning more about Angela would be more than happy visit, talk to your students or facilitate some activities with them.

Keep an eye out for information on the next Zui in term 2.

## Imagine the future of your favourite spot. How would you like the freshwater to be?

The word cloud includes the following items:

- having an icecream
- clear water
- Clear
- clean
- no pollution
- lots of life in the water
- no plastics in the water
- like to be calm
- trees
- people having fun
- lots of fish
- people walking their dogs
- birds and native plants
- beaches by rivers and lakes that are clean
- clean water to swim in

## Want to learn more?

Find out the names of the local bodies of freshwater near your school and in your community. Are they their original names? What stories do the names tell you?

How is the water from our aquifers treated before entering our pipes? Where does it go when we have finished with it?

How do freshwater scientists study the quality of the water?

Ask Angela to come in and help you do a stream study.

How do our streams become polluted?

Make a water bracelet and measure how much water your school uses.

Research the Whanganui River. It has been given person hood status.

# Community Spotlight



**Kaipupu Sanctuary** is a community project in the middle of Picton harbour, which aims to restore a 40 hectare 'mainland island' back to its original beauty. Only a ten-minute boat ride from Picton, the Sanctuary can be accessed by private boat, water taxi or kayak.

Allow 1.5 - 2 hours to leisurely walk around the 2.7 km circular track and enjoy the bird song, native forest and stunning views across the inner Queen Charlotte Sounds. As you walk around the Sanctuary you will see several traps which help protect our unique plants and animals from pests. You will also see a predator-proof fence along the southern boundary which along with the surrounding sea helps protect the Sanctuary's birds from mammalian invaders.

Entry to the Sanctuary is FREE but donations are welcomed at the donation box near the jetty.

**The Kaipupu Experience** is an Education Programme brought to you by Kaipupu Sanctuary.

Kaipupu Sanctuary is offering local and visiting schools and students an opportunity to learn about local biodiversity, the native plants and birds found in this region, and what we can do to protect them and enhance their and our environment.

The aims of this Environmental Education programme are for students to develop:

- **Awareness and sensitivity** to the environment and related issues
- **Knowledge and understanding** of the local natural environment and the impact of people on it
  - **Attitudes and values** that reflect feelings of concern for the environment
  - **Skills** involved in identifying, investigating, and solving problems associated with environmental issues
- **A sense of responsibility and ownership** through **participation and action** as individuals, or members of groups, whānau, or iwi, in addressing environmental issues.

## Cost

There is no cost to the school if you successfully apply to [Port Marlborough Sounds Discovery Fund](#). Port Marlborough have generously provided some funds to pay for the water taxi and any transport to Picton which might be required to take part in this day. Please contact Connie at Port Marlborough on [connie.smith@pmnz.co.nz](mailto:connie.smith@pmnz.co.nz) for details. (Schools only)

## Further Information

Please feel free to contact Kaipupu Sanctuary for further information, answers to queries, or to discuss available dates. We are very flexible and can easily adjust the programme to suit your times, circumstances, and classroom teaching topics. If you are an ECE service please contact Anna to discuss an adapted version and finer logistics.

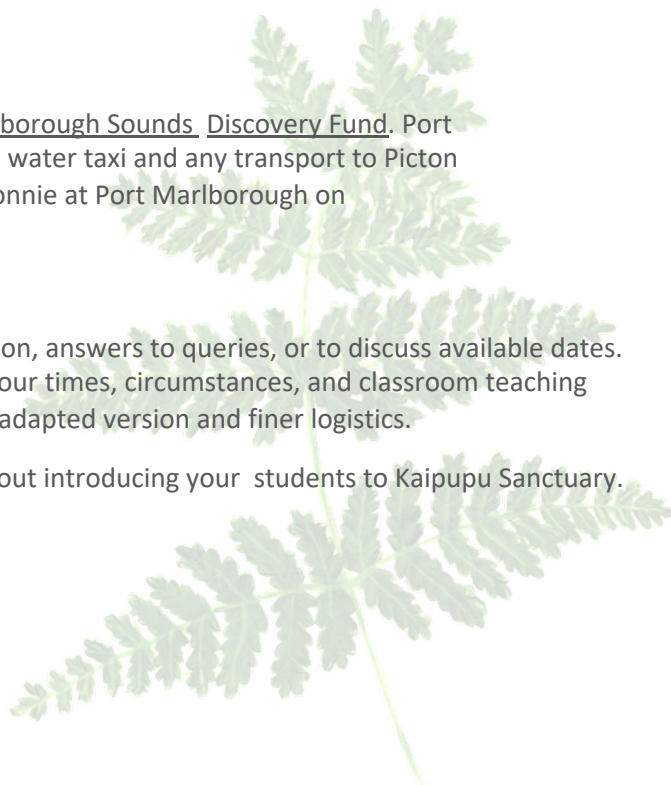
We look forward to hearing from you and we are really excited about introducing your students to Kaipupu Sanctuary.

Anna Polson - Kaipupu Sanctuary Manager

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[www.kaipupusanctuary.nz](http://www.kaipupusanctuary.nz)

0272 880 503



# Coffee and Cake Catch Up

This term we started our new workshop sessions – Coffee and Cake Catch up. The intention of these is to create an opportunity to connect with others from across the education sector whilst exploring an area or topic of interest.

Our first focus was Whole School/Centre Vision Mapping. It was a practical workshop that involved mapping out the existing environment and then unpacking the purpose of a vision, what to include, how to capture everyone's voice and how to keep it alive.

In March, Angela provided us with the knowledge of how to set up and run a successful compost and worm farm. This was well attended with a mixture of both ECE and School staff. Tua Marina School kindly let us use their grounds for hosting this workshop which meant that we could take a look at their fantastic three stage composting system.

If you missed either of these or would like to access the resources from these two workshops, they can be found on our Padlet

<https://padlet.com/EnviroschoolsMarlborough/coffee-and-cake-catch-ups-3qk0twokqbhtks0>

**Keep an eye out in next terms Sustainable Action Ideas newsletter for what else is coming up or on our website**

<https://www.enviroschoolsmarlborough.co.nz/events>

**We would also love to hear your ideas for any future workshops so please get in touch.**



## Coffee and Cake Catch Up Term Two

Hear how Enviroschools resources and activities can be used to support you in teaching the **New Zealand History Curriculum.**

Explore links and activities that are place based, experiential, and grounded in local Wairau spaces, landscapes, and stories.

Open to Principals, Curriculum and Enviroschools Lead Teachers.

Thursday 18 May 3.30 – 5 pm

Join us from 3.15 for coffee and cake before hand.

Venue to be confirmed.

RSVP Friday 12 May

### Our team

There are three of us working in the MDC education team to support you and your students, as well as Ramona Millen, who facilitates the Enviroschools programme in kindergartens. We also have some talented people in our organisation and community that we can link you with, and good connections with the team at DOC.



**Annie McDonald | Education Officer & Enviroschools Regional Coordinator**

Annie is an educator, has taught at primary and secondary schools, and is passionate about showing schools how they can integrate education for sustainability into the curriculum. She gets a thrill from working with students to grow environmental leaders.



**Angela Wentworth | Environmental Educator**

Angela is a horticulturalist, and regularly has her hands in the soil with students. She also trains our Kids' Edible Gardens facilitators and supports schools with inquiry learning into things green.



**Ramona Millen | Early Childhood teacher and Facilitator**

Ramona has strong links with the natural environment having growing up in the Marlborough Sounds, and strives to include this love and passion through her educational role with young tamariki. Ramona strives to empower those around her with the knowledge of how to look after themselves and Papatūānuku.