

# EcoBuzz

EcoBuzz Edition 70

Term 2 2018



Golden Bay Kindergarten Tamariki learn about waste minimisation

**IN THIS ISSUE:** Youth leaders in action, Moturoa Mission photos, WaiRestoration Hui, Riuwaka and Matariki sharing's and much more

## Kia ora tatou

It seems we are indeed in a 'climate of change'. We have farewelled Adie Leng from our team and eagerly await her replacement.

Many people are now willing step up to the mark in changing habits/practices and conversations.

Boomerang bags not plastic bags as reducing our use of plastic is far more beneficial than recycling them. Growing our own food is the least possible carbon/food miles and now common in most of our schools. Bikes in schools getting funding from of Health Organisations, youth leaders stepping up for action and much more.

We hope you find much inspiration in this issue of EcoBuzz to create an even bigger wave of positive change.

*Thanks Heather, Joanna and Claire*



“The World has no remote control. If there are things you don't like, get up and change them yourself.”

*Libby Treadlighter*

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## The Team

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Our new team member



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# Regional Enviroschools



## 2018 Moturoa Mission moments



## WaiRestoration Hui

Nelson region was lucky enough to send a four-strong delegation including Joanna Wilson (Nelson City Council), Susan Moore-Lavo (Nelson City Council), Brooke Turner (Department of Conservation) and Heather Graham (Nelson Enviroschools) to experience and learn about the programmes that have been developed in the Far North. Read more about the WaiRestoration Hui as reported on the Enviroschools website. If this is an area of interest to you, please get in touch with your local facilitator and we can send you a copy of the project book and discuss ideas around this with you.

About 50 people from across New Zealand gathered in Kerikeri from 26-28 March 2018, for the country's first national Enviroschools WaiRestoration Hui.

WaiRestoration is a project that focuses on engaging young people and local communities to take action to restore local waterways and biodiversity. Initially conceived by members of the Northland Regional Council's (NRC's) Enviroschools team in 2013, the project has been developing constantly since then.

Councillor Joce Yeoman said the three-day hui – a joint initiative between the NRC and Enviroschools' national body Toimata Foundation – was designed to inspire and teach other regions wanting to implement the Enviroschools WaiRestoration project.

"I'm incredibly proud as a regional councillor that our Enviroschools team has developed the WaiRestoration programme and is able to now share it with others from around the country," said Cr Yeoman.

A number of local organisations, Tangata Whenua, students and teachers, farmers, landowners and others attended the hui, passing on their WaiRestoration experiences to participants, who came from as far afield as Otago.

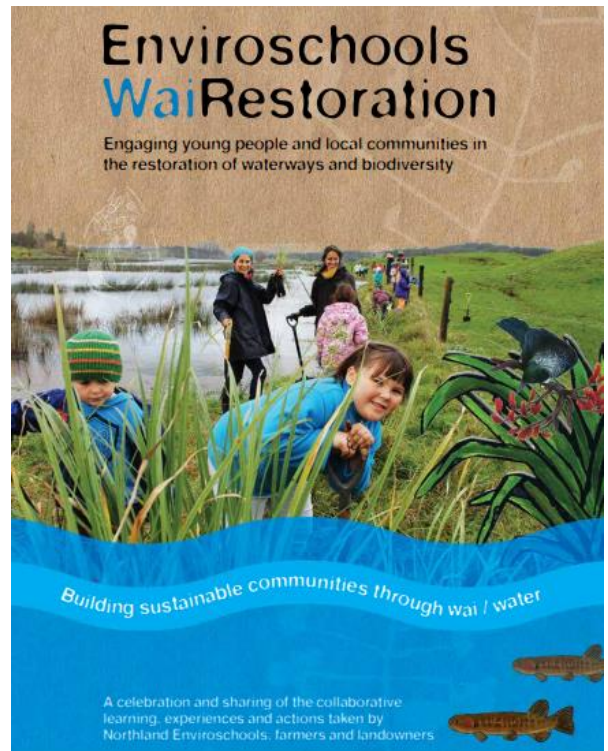
Participants also received copies of a specially designed booklet outlining Enviroschools WaiRestoration and learned about the seven elements at the heart of the project:

- WaiFencing (keeping stock out of waterways)
- WaiNurseries (growing riparian plants)
- WaiPlanting (planting beside waterways)
- WaiMaintenance (keeping out plant and animal pests)
- WaiMonitoring (testing and tracking water quality)
- WaiEnterprise (creating sustainable employment)
- Save a Species (restoring endangered plants and animals).

The hui included a number of hands-on workshops and visits to existing restoration sites in and around Kerikeri to see how the programme might be adopted or adapted for other regions.

The beautiful WaiRestoration resource has been printed and is ready for sharing around our wonderful motu!

Enviroschools WaiRestoration is engaging young people and local communities in the restoration of waterways and biodiversity, building sustainable communities through wai/water.



WaiFencing demonstration

## Be Plastic Clever

Some of our schools were lucky enough to catch up with Libby Treadlighter as she travelled NZ spreading her message about the issue of plastic pollution last term. Her desire to pass this on was inspired by her work as a marine biologist working with manta rays and whale sharks.

As if traveling the world delivering this important learning was not enough, Libby took on a challenge laid down to her by her students in the UK (yes she is a teacher also); she is travelling under the power of her own legs on a bamboo bike she made herself.



The “No straw thanks” story of a four year old that changed his local cafes stance on straws just by delivering his simple request of no straw for his drink was a perfect example of the care Libby took to show the tamariki that, while the messages are serious, regardless of age everyone can take on the work of saving our planet one small act at a time, and in doing so become a real life super hero.

I loved her “Be Plastic Clever” mantra as well as her plastic-clever levels of awesomeness!

If you missed out on this talk, fear not. You can follow her journeys via website and Facebook <https://www.treadlighter.org/>, and below are Libby on her home-made bike, photos from her travels and talks, and her plastic clever levels.

How can we all make a difference?

### Yellow belt treadlighter superhero

- Be plastic clever yourself – follow the Rs



### Red belt treadlighter superhero

- Make other people plastic clever – family, friends, local cafes etc.
- Eat only sustainably caught fish

### Black belt treadlighter superhero

- Make lasting change in your country – write to companies to make them more plastic clever – ear bud companies etc.
- Tell others about plastics and spread the message even further!
- Wear natural fiber clothes - microfibers



## Resilience

Foreword by Heather Graham

My thoughts have been drawn to the concept of resilience since this year's Moturoa Mission.

The following article by All Blacks mental skills coach, therefore caught my eye! Gilbert says "Developing resilience is about exposing yourself to waves of stress and waves of recovery ....The world teaches everybody how to grind and how to get exhausted, but no-one is ever trained on how to pull themselves out of sixth gear."

Read on to hear more of what he has to say.

### All Blacks mental skills coach urges Kiwis to take time out

1 May 2018 - STUFF

<https://www.stuff.co.nz/life-style/well-good/motivate-me/103517319/all-blacks-mental-skills-coach-urges-kiwis-to-take-time-out>

All Blacks mental skills coach Gilbert Enoka says people can waste their downtime feeling bored, guilty or anxious when in fact it makes them more productive. The man charged with keeping the All Blacks emotionally fit is urging Kiwis to prioritise downtime.

Sports psychologist Gilbert Enoka is helping promote All Right?'s latest mental health campaign, which gives away free dice featuring downtime activities such as enjoying music, getting outside, or catching up with a mate.

Enoka has helped transform the national rugby team – playing a pivotal part in taking them from the depths of despair after their 2007 World Cup quarterfinal loss to the French through to their record-breaking Rugby World Cup triumph in 2015.

In his 18 years with the All Blacks as a mental skills specialist, Enoka worked closely with coaches Wayne Smith, Sir Graham Henry and Steve Hansen.

The keen bikram-yogi said downtime was an integral part of his coaching and helped athletes and business people perform at their best.

Enoka coaches people to find small 10 to 15 minute activities, which can be as simple as reading a book, having a cuppa with a friend, or going for a walk, to schedule deliberately into their day. He calls these "triple A batteries". "They're like pit stops in a race where you just go into to fill up energy."

They must be activities people can do wherever they are and not depend on anyone else.

The "double A batteries" are longer activities to be scheduled a couple of times each week such as a movie, a catch-up with friends or a gym session.

The "As" are the biggest batteries – think weekend away or family outing – to be scheduled a few times a year. Enoka schedules gym sessions as part of his downtime. Taking downtime should not bring on feelings of guilt as it made people more energised and productive, Enoka said.

"The world teaches everybody how to grind and how to get exhausted, but no-one is ever trained on how to pull themselves out of sixth gear."

Scheduling was key to avoid wasting downtime feeling guilty, bored or restless, he said.

When Enoka, who lives in Christchurch, has a day off, he schedules in exercise and a 90-minute massage.

"Developing resilience is about exposing yourself to waves of stress and waves of recovery. Having downtime is good for your recovery."

Associate Professor in Disaster Mental Health at Massey University's Joint Centre for Disaster Research Sarb Johal said research indicated people kept busy to avoid facing uncomfortable feelings.

"Our mind is quite difficult to control. When we leave it wandering it goes into problem-solving and threat-detecting mode, which can lead to anxiety."

# Regional News

The dice would be helpful for people to be more purposeful about their time off, he said.

"People will make a deliberate decision to roll the dice and do something that's going to be good for them."

All Right? manager Sue Turner said small breaks could make a big difference "Just a few minutes of quality downtime can boost our energy, focus, creativity, productivity and happiness."

All Right? was established after the 2010 and 2011 Canterbury earthquakes to support mental health and wellbeing.

<https://allright.org.nz/>

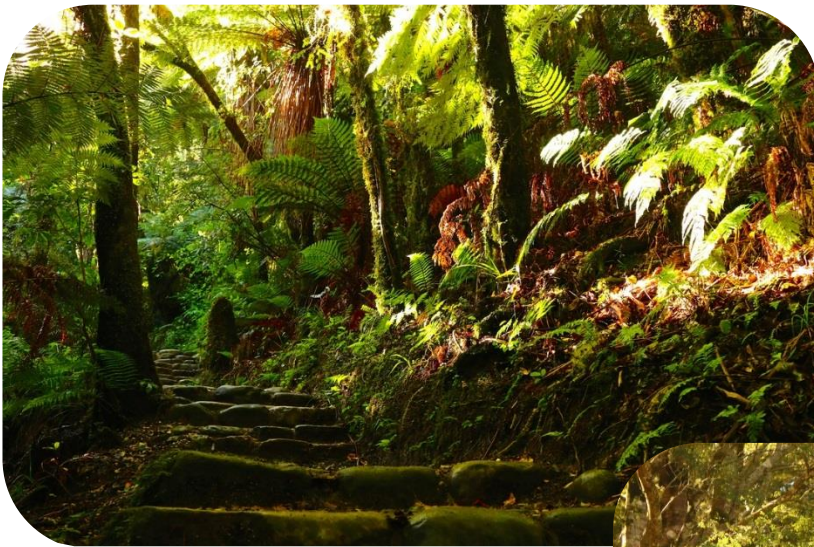
## READ MORE:

- \* Gilbert Enoka rides through journey to inspire New Zealand rugby revolution
- \* Successful wellbeing campaign to roll out in Kaikoura and Hurunui
- \* Johnny Moore: Man up and help your mates through the tough times



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## Riuwaka Resurgence

 - one of the many truly amazing places where one can experience the wonders of this unique land and begin to understand the strong spiritual heritage of New Zealand. Nature and culture hand in hand. <https://www.binspirationz.com/blog-posts/the-riwaka-resurgence>

<https://www.teatiawatrust.co.nz/marae-and-atiawa-land/history/>

## The History of Te Ātiawa and the Migration to Te Tau Ihu

### Toi-kai-rakau, the wood eater

Te Ātiawa stem from Toi-te-huatahi or Toi-kai-rakau; the wood eater. Toi was the progenitor of many tribes occupying a considerable stretch of country, eight generations prior to the waka migrations of the fourteenth century. Soon after Toi arrived in New Zealand with his people, he established a pa at Whakatane. In the years following, descendants of Toi moved further afield and different familial branches arose, including: Te Tini o Awa, Te Marangaranga, Te Tini o Tuio, Te Tini o Taunga and Ngā Turanga.

One of Toi's sons, Ruarangi, married a woman named Rongoueroa. Rongoueroa was the mother of Awanuiarangi; the eponymous ancestor of Te Ātiawa. According to tradition, the father of Awanuiarangi was Tamarau-Te-Heketanga-A-Rangi (Tamarau), a whatukura or heavenly guardian from the tenth heaven. A child of Ranginui and Papatūānuku; Tamarau came down from the heavens after seeing Rongoueroa bathing beside a stream. He took the form of a man and embraced her. From their union, Awanuiarangi was born. From Awanuiarangi came the multitudes – Te Tini o Awanuiarangi. They grew strong and settled themselves principally at Taranaki and Whakatane.

### The origins of Te Ātiawa are recounted in the following ngeri:

Tamarau no Runga i Te Rangi heke iho ki raro  
ki te whakamarimari te tari ai Te hurahanga  
o te tapora o Rongo-u-eroa  
Taku kuia e! Taku kuia e!  
Te Ara o taku tupuna o tohia ai au  
Ko Te Ātiawa no Runga i Te Rangi  
Te toki te tangatanga e te ra  
Taringa mango, ko to kete nge Ue ha! Ue ha!

Tamarau from the heavens above came down to make  
love  
and waited until he could have  
Rongoueroa to wife  
She is our Kuia! She is our Kuia!  
This therefore is the consecrated pathway of my ancestors  
e Ātiawa from the heavens above  
The adze (of Tamarau) which can remove the very sun  
from its axis

### The Awa people



The descendants of Awanuiarangi, the Awa people, occupied Taranaki for many generations. Te Ātiawa is sometimes referred to as the Awa tribes or Ngātiawa. Te Ātiawa connects with the three hapū; Te Kahui Tu, Te Kahui Rangi and Te Kahui Tawake. These hapū originated from the ancestor Rua Taranaki; the first man to climb Maunga Taranaki. Some of the earliest tangata whenua to have occupied Totaranui and the surrounding districts came from these three hapū.

The Awa people living in Northern Taranaki in the nineteenth century commonly used the name Ngāti Awa. Te Ātiawa Manawhenua Ki Te Tau Ihu Trust recognises that the Tūpuna of all its beneficiaries at one time came under the name of

Ngāti Awa. Through the years the name of Ngāti Awa has evolved to where many of the descendants of these Tūpuna now go by the tribal name of Te Ātiawa. It is also recognised that many continue to go by the name Ngāti Awa.

Today, the manawhenua status of Te Ātiawa is recognised within the four Marae across Te Tau Ihu; Waikawa, Whakatū, Te Āwhina and Onetahua all have Te Ātiawa interests.





## Youth EnviroLeaders Forum (YELF) Sir Peter Blake Trust



Each year around 55 secondary students from across the country are chosen to attend the week long leadership development adventure hosted by the Sir Peter Blake Trust.

This fully funded programme will allow students to:

- Learn more about the environmental issues of climate change facing New Zealand, particularly ocean acidification, greenhouse gas emissions, climate trends, liveable cities, adaptation and resilience.
- Develop leadership skills while participating in outdoor activities.
- Meet and engage with inspiring and informative speakers, including experts from the Ministry for the Environment, Sir Peter Blake Trust alumni, local and national politicians, business and community leaders, and like-minded peers.
- Join future Young Blake Expeditions as student voyagers.

It is important to note that the applications for this close Mid-February each year and therefore is worth discussing with your Enviogroups before senior students leave on study leave and head into exams. Enviroschools will endeavour to get information out to you around this time, but feel free to also sign up to their newsletter <https://sirpeterblaketrust.org/contact>

### Two of our own attended this year's YELF and here is a quick download of their thoughts!

**Josephine Ripley - Nelson College for Girls**

WOW moments on YELF:

One of my favourite experiences was the climate change debate where we nominated a Prime Minister, Deputy Prime Minister and Climate Minister (Jacinda, Winston and James) and then we were all assigned various jobs as CEOs for businesses, members of parliament, advisors etc. I was an advisor for Jacinda Ardern and it was a hilarious and very informative evening. Everyone was in character and we were debating about carbon emissions and the ETS. Not only did I learn a lot, but it was really interesting to assess the climate situation in regards to parliament's role first-hand.

I also thoroughly enjoyed going out into New Plymouth harbour and collecting ocean acidification samples and then later looking at incredibly beautiful plankton under the microscope.

The whole week was jam-packed with so many incredible opportunities but I think just being around so many like-minded people was one of the most rewarding parts. Sometimes it can be disheartening to be around people who seem like they don't care about the environment so it was amazing to be around people who were all passionate about the same thing. Furthermore, there was something to learn from everyone, especially the chaperones who were all from different professions or walks of life and all had fascinating stories to share. We were introduced to so many different people from the incredible photographer to the director of the Ministry for the Environment to Minister Mahuta and we made so many valuable connections.

My 'What the?!' new learning moment' was probably learning more about ETS, which I hadn't fully understand before, and about free allocation. At first, it seemed really inaccessible but one of the awesome chaperones from the Ministry for the Environment explained it to us all and made it really interesting.

# Schools Taking Action

My main interests and passions around sustainability and the environment are probably to do with waste management, in particular, plastic and how we can reduce our usage of single-use plastic. I am also passionate about our waterways and how we can keep them clean and thriving.

I have always been in love with the natural world and felt a strong connection to our taiao and a sense of responsibility to protect it. I think my family has instilled these core values in me, as they are all very environmentally conscious. I'm a New Zealander of Pasifika heritage so climate change is something that is directly affecting my family in the Pacific so it really resonates with me on a personal level.

Being a part of our schools envirogroup has been amazing. It has connected me with SO many like-minded, passionate people and given me many opportunities including going on EnviroSchools' Hui which have been so beneficial. In particular, Mrs Thomas and Heather have been so supportive and encouraging for our envirogroup and ensuring we have everything necessary to make change in our schools and communities.

## May Takahashi - Motueka High School

The whole YELF program was an amazing experience but getting to meet like-minded, passionate young leaders from all around the country was honestly such a highlight for me. We had the privilege of speaking to experts from all manner of fields; from marine biologists, renewable energy companies to politicians. This gave us a heap of insight into what would have otherwise been uncharted territory for us, and allowed us to understand and form informed opinions on the subject at hand. What I found absolutely crazy was the sheer amount of carbon even an environmentally conscious person like myself emitted, just by going about my life. A fun little fact I found out was that it would take five years for a tree to offset my carbon emissions from one regional flight with no return flight.

My passion used to lie in native flora and fauna restoration and conservation, but now I've found interest in climate change topics as well! I have been an Abel Tasman Youth Ambassador in partnership with Project Janszoon and DOC for the past three years where my growing interest in environmental efforts and issues have been kindled and nurtured. Before that, although I definitely cared about the environment, I was nowhere near as passionate as I am now.

My school environmental coordinator Mrs. James has been an absolute gem for the three years I have been involved in environmental movements. She has always been there for a chat and has supported my ideas no matter how crazy they've been. My ATYA coordinator Brooke has also been invaluable help; if I wanted to do something she would go above and beyond her call to make it happen. If not for these people and their support and encouragement in my life, I would most definitely not be the same person I am today. My leadership skills would have most likely sat below mediocre along with my confidence and I would have nowhere near the same amount of insight and love I have for environmental topics and issues.





## Active Travel Enviroschools Event inspires students

*A Nelson Heritage Festival event inspired Nelson Enviroschools students to develop their ideas about active travel and link them to how their grandparents and great-grandparents may have travelled to and from school.*

Twenty six classes from four Enviroschools took part in the three-day active travel challenge – which could include Victorian dress-ups, comparing photos of modern-day Nelson to historical photos, and learning about travelling as a character from the past.

The event was comprised of a three-day active travel challenge followed by a hands-up survey of normal travel on the fourth day. The last day was reserved for celebrations.

Nelson Central had the highest number of classes taking part and students took learning to a high standard. They interviewed residents of the local rest home and held a student-led active travel before school fun event.

Other highlights were the huge effort that students from all schools went to in dressing in theme, and class discussions even saw Birchwood students learn about children who used to arrive at school via horse and one by plane!



This event was a great opportunity for schools to enjoy the use of the Sport Tasman bike skills trailer, testing children's abilities and determination.

Nelson Central enjoyed the winning prize of a "History of the bike" performance and storytelling workshop by Tanya Batt from Imagined Worlds.

Term two will see many classes from Auckland Point, Birchwood and Victory Schools enjoying the other prize that was up for grabs; a visit from their Enviroschools Facilitator with her "Fender Blender" smoothie maker ... healthy smoothies are but a pedal away!

*Student organizing committee at Nelson Central School (back left to front): Summer Atoa; Jack Campbell; Bruno Page; Zoe Dunston; Dan Turinsky; Diana Garcia – Fernanda.*

### Sustainable celebrations

When planning began for the first Enviroschools Heritage Festival event we were inspired by Nelson Heritage Festival's Tom Ransom's past experiences in the UK with active travel, and thought a link to history might make for an interesting angle to promote our work around sustainable communities, health and energy.

"Prizes" are always a little challenging when working in the area of education for sustainability. We don't want to be producing lots of waste in the process. I had seen the Fender Blender concept being used in other areas and thought it spoke of innovation, health and of course FUN. Lucky for us, Tom had used these in the past and knew just where to source one!



**Next level participation**  
*Dan Turninsky and his dad put together a retro Sci-Fi "Transport Chariot Machine" to life as part of the challenge. Dan's Mum said "Dad is a bit of a genius when it comes to this sort of thing. I, well I just helped paint"*



*The Travel show prize – Nelson Central*

# Schools Taking Action



*Hampden Street School – feijoa goodness*

*Hira's muddy cross-country race*



*Victory School envirogroup – pre learning before their waste audit*



*Golden Bay Kindergarten play Russell the Rubbish Bin game as they learn about waste minimisation.*

*Also cover photo*



*Nelson Intermediate School – year 7 tamariki from Te Pitau Whakarei for these amazing Pou completed last term in Art class.*



## Salisbury School helps out in the wider community.

We were asked by the "Friends of Mangarakau Swamp" if we could make some lizard houses that could be placed around the wetland and surrounding bush so that over time a species inventory could be undertaken.

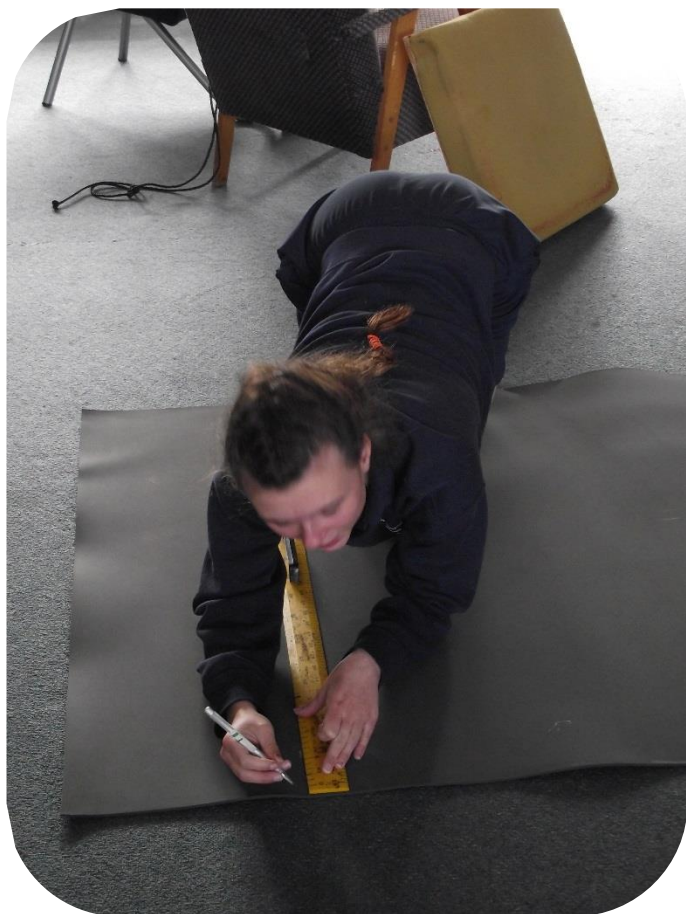
The school had previously installed a number of Weta hotels in the area and a Forest Gecko was found in one of the Weta boxes while students were collecting data on numbers of occupants per Weta house several years ago.

The local Banded Rail project also liked the idea of some houses for the riparian strip at Maisey's Embayment and an area of coastal Manuka west of Manuka Island for species identification. This will provide a baseline to see what improvements are being made through their trapping programme.

Our students go across to Mangarakau for environmental camps and to do some volunteer work such as planting trees and checking the houses will be part of their environmental learning.

The school Board of Trustees applied for, and was granted, a Wildlife Permit from DOC which enables us to access these as an educational tool as well as having a nominated person to check both the Mangarakau and Banded Rail lizard houses on a more regular basis.

The school applied for material to make a selection of three different Lizard houses for these community projects and were the lucky recipients of a TDC Community Grant in 2017.



*Salisbury student design and make lizard houses for Mangarakau.*

## Don't fret, do good stuff - a young enviro leader reflects

Had you asked me how I felt about our world two months ago, I could have easily sighed, flopped into a chair, and begun to fret over the state of our earth. Ask me now how I feel about the earth and all inhabitants on it and I might say something like, “there’s a lot that I don’t know, but I believe there are thousands if not millions of people out there committed to change.” Last month I had some of my belief in humanity restored. I was one of 29 lucky New Zealand youth to be chosen and sponsored to attend the 9th biennial NZAEE (New Zealand Association for Environmental Education) conference in Wellington.



Earlier this year, after hosting Hannah and Liam from 'The Rubbish Trip' (two individuals living a zero waste lifestyle and spreading the word throughout NZ), I began to make daily changes to begin living a zero waste lifestyle. Beginning to live zero waste has been one of the hardest personal goals I have chosen to undertake. It has brought my awareness of 'all the painful and irresponsible things humans do' to the top of the surface where I haven't been able to look away and ignore the challenges anymore. My mood steadily went downhill as I dwelled in the 'impossibility' of the human situation. I walked into the conference feeling the weight of the world on my shoulders but left feeling more hopeful. Why? Because I realized it isn't just me that cares.

This conference saw 218 delegates networking with other like minded individuals and organizations. NZAEE, a national non-profit organisation, promotes and supports environmental and sustainability education across Aotearoa/New Zealand. The organisation began in 1984 and 'is a network of passionate and committed people working to promote and support environmental education, lifelong learning and sustainable behaviour', said Pam Crisp, an NZAEE member and one of the conference organisers.



Ben Moorhouse, the youth delegation host and Outreach and Education Coordinator for DOC said, “The conference was a great opportunity to connect with new, reconnect with old and remember that we need to work together. Youth attendance at this event and similar events/programmes in the future is vital. The diversity youth voice brings to the EE (environmental education) sector is pivotal when making decisions for the future of our planet. Youth are the change makers of now and the future.”

People from all over New Zealand, ranging from junior high school students right through to the other end of the age spectrum, members of local councils, government, schools and other organizations took part in the 3 day conference. As the youth delegation, we were not only encouraged to participate, but also actively listened to and acknowledged. We were spoken to by James Shaw, Climate Change Minister and co-leader of the Green party, and asked to imagine what New Zealand could look like in 30 years time if we continue to use resources in the same pattern we are using them now. He then asked us to visualise a world where we had made wise choices and 'got it right'; a bush full of birds, electric vehicles, clean beaches, families biking to school and work and New Zealand children playing with children from refugee families. We took part in workshops that looked at the effectiveness of trapping, planting trees and supporting our loved ones to make sustainable actions. I hope that with the connections and energy from this conference, I can help with the land-based and youth initiatives already occurring in Golden Bay. I would love to see some GBHS (Golden Bay High School) students attend the next NZAEE conference in 2020 too.

# Schools Taking Action

Attending the conference was like drawing back the curtains onto a group of people spreading hope, not fear into our world. The people I met at the conference seemed to not only be aware of the problems, but actively seeking creative solutions to environmental education too. I think sometimes the seriousness of climate change and the direction we are headed in currently can be totally terrifying and overwhelming. There are some serious talks we as society need to have, But alongside those conversations and necessary actions, I think we need to hold onto faith. It is not about sitting in hopeless despair and doing nothing, but starting small and making achievable changes to our individual lifestyles and communities – while still holding the bigger picture. Don't fret, do good stuff, we will survive (I think.)

**Tullia Wilson, youth delegate**  
**Takaka, Golden Bay**

*The NZAEE Youth Delegates. Tullia is in the middle sporting bright orange hair*



## TOP 10 FOODS NEW ZEALANDERS THROW AWAY



THE AVERAGE FAMILY THROWS AWAY

**\$563**

WORTH OF UNEATEN FOOD PER YEAR!

that's



THREE SHOPPING TROLLEYS' WORTH OF FOOD THAT GOES STRAIGHT IN THE BIN!

**\$872,000,000**

for



each family is tossing out

**79**

KILOS of uneaten food per year

IT'S LIKE BINNING  
**55**

SIZE 14 CHICKENS

OR

**888**  
APPLES



SIX SIMPLE THINGS YOU CAN DO TO REDUCE YOUR FOOD WASTE

PLAN YOUR MEALS AND BUY WHAT YOU NEED

Store your bread in the freezer



KEEP POTATOES IN THE DARK

Take your leftovers for lunch ✕

Stew fruit or make smoothies

Add leftover chicken to a PIZZA, in a PIE or in a PANINI

**LOVE FOOD**  
hate waste

[www.facebook.com/lovefoodhatewastenz](http://www.facebook.com/lovefoodhatewastenz)

## MATARIKI ~ MARAMATAKA WINTER

Ngunguru ana a Ruaumoko.

Takahuri haere ai i te kopu o te Whaea;

Pānuitia, whanuitia atu ki te Ao

He Wāhanga tau e huri ana;

Ke te Takurua! Ko te Hotoke!



Ruaumoko rumbles, turning within Mother's womb, announcing widely to the world, the season is changing it is now Winter

**MATARIKI** – A time for gathering and reflection. Conservation of energy and resources, are strong themes for this time, tuning us into our roles and responsibilities with respect to our environment.

A time to focus our hinengaro – be conscious of Nga Tuku Iho – the treasured natural resources that sustain our well being/mauri ora, conserved by our ancestors. In what ways are we practicing kaitiakitanga daily to ensure the preservation of nga tuku iho for generations to come?

As the temperature decreases and the waters begin to freeze the tuna slumbers, burrowed away, coiled up in a protective coating of slime. Those who have not taken their final journey – the heke to close the circle of life and bring forth the new.

### Ngā hua o te whenua - The fruits of the Land

Papatūānuku provides the earthen base of soil from which kai will grow and provide for our sustenance, she holds the water that together with the warmth of te Ra will bring the fruits to harvest. Stone to mark, to cut, tunu kai and to adorn.

### Ngā hua o Tāne – The fruits of Tāne

Rākau from Tāne can provide for the building of vessels to carry us across water, to warm us, to home and to hold, and to cook our kai. Within te wao a Tāne we find the supplied growth to create rongōā for our healing, the ngārara, the manu and all the life between ground and sky (Rangi & Papa)

### Ngā uri a Tangaroa - The children of Tangaroa

In pre-European times, the diet of Māori was limited to plants, seeds, insects, birds and fish. Tangaroa relates to the birth and evolution of humanity. In a sustainable sense was the kai kete of the most sought after foods. Matariki is a time to reflect on how well we have conserved the resources of Tangaroa.

Ngahuru –	Autumn
Takurua Hotoke–	Winter
Koanga Manuru	Spring
Raumati –	Summer

Ka tīmata tēnei tirohanga o te Marama. E 30 ngā pō i w1ahanga ā, ko te pō tuatahi ko whiro, ko te tuarua ko Tirea, ā Mutuwhenua noa, te pō whakamutunga. Hei muri i tēnei kua timata anō i a Whiro, ā Mutuwhenua noa.

The cycle begins with the new Moon. There are 30 nights in each cycle: Whiro is the first night of the new moon, Tirea is the second night and so on until Mutuwhenua, the last night. The cycle starts again with the appearance of the next new moon, with Whiro, Tirea and so forth



## The cycle of each moon



**Whiro** – New Moon

**Tirea** – favourable for fishing, eeling and planting

**Hoata** – very good day for planting, fishing and sowing seed crops

**Oue** – good for establishing tuber beds, planting kai & fishing

**Okoro** – Plant kai, fish are restless

**Tamatea kai ariki** – A day for planting kai. West winds prevail unless rain quells

**Tamatea ā ngana** – Eels are hungry, planting and fishing are favourable but beware of fog and foaming sea

**Tamatea āio** – Productive day for shellfish collection, other kai abundant but may be undersized. A cautionary time for fishermen

**Tamatea-whakapau** – planting favoured i te ata (AM) not a good day to fish

**Airoa** – A disagreeable day, mark time

**Huna** – Not suited to planting or fishing nga ika are wary

**Māwharu** – Most favourable for planting, a good day and night for fishing and use of hinaki

**Ōhua** – very favourable day for planting of kai

**Atua whakahaehae** – not good for planting or fishing

**Ōturu** – good for bobbing eel, fishing and planting kai from midday

**Rākaunui** – A very good day. Fishing is favoured but not eeling, crops are bountiful

**Rākaumatohi** – Fishing good, but not eeling, plant growth vigorous

**Takirau** – 3rd night after Full Moon – Hazy moon, found bountiful but undersize

**Oike** – not favourable for planting or fishing

**Korekore tē whiwhia** – an unproductive night on the shore, wind sweep the moana

**Korekore tē rawea** – Not a fruitful night, food is scarce but await the turn of the tide

**Korekore piri ki Tangaroa** – Midday to sundown favourable for eeling, most kai plentiful

**Tangaroa a mua** – good for planting kai, catching fish and eels

**Tangaroa ā roto** – productive for fishing and planting kai

**Tangaroa whakapau** – Good for fishing and cultivation of seed beds

**Tangaroa kiokio** – A very good day for capturing kai moana and good for planting crops

**Otāne** – A good day for fishing, eeling & crays. Reasonable for planting kai

**Ōrongonui** – Very productive for planting, fishing and eeling

**Mauri** – Not productive, kai scarce, fish restless and flighty

**Mutuwhenua** – Unproductive day and night, Marama diminished, Te Ao in darkness

## NGA KAI A MATARIKI NĀNA I TE AO AKE KI RUNGA

Ko te huihuinga whetu ki Matariki e!

I hou mai nei i waho i te pae

Matariki ahunga nui

Matariki hunga nui Matariki

Matariki tāpuapua

Ko Matariki e!

Me huihui mai, me korikori mai

Me whakataka kai, me whakangahau mai,

Me whakanuitia ake ai;

Ko te wā motuhake i tau mai nei,

Ko te tau hou;

Ko Matariki e!

Tirohia atu ra! Ka Tohungia mai nei!

He tau maku, maroke ke;

He tau kai nui, kore kai ke;

Nga kai a Matariki,

Nana i ao ake ki runga

Ko Matariki e!



## THE FOOD SUPPLIES OF MATARIKI - BY HER SCOOPED UP

The assembly of stars, Matariki

Has moved beyond the horizon

Matariki with mounds heaped up,

Matariki when people gather,

Matariki when pools are everywhere;

Let's feast let's dance and sing, Matariki e!

Let's gather , let's move together

Let's celebrate this special time now upon us,

The New Year; Matariki e!

Look up there! See how it guides us!

Will it be a wet season, will it be dry?

Will it be a season of abundance, of food scarcity?

The food supplies of Matariki, by her scooped up

Matariki e!

Mel McColgan

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## How to eat an apple like a BOSS

<https://www.youtube.com/watch?v=vdCGnuccRv0>



## June 5 – World Environment Day

Take part in the worldwide #BeatPlasticPollution game of tag on social media



In the build-up to 5 June, we want to get people around the world sharing with their friends, families and colleagues what they are doing to change their single-use plastic habits.

Join the global #BeatPlasticPollution game of tag: Invite students and staff to take a selfie with their canvas shopping bag, metal straw or any other reusable product and tag five friends, telling them to do the same. The person tagged should post a photo with their reusable item within 24 hours.

Challenge other institutions to join you in cleaning the planet: Announce that your school or university is cleaning up plastic litter in a park or public space for World Environment Day. Tag other schools/universities, challenging them to do the same.

Encourage another institution to make a plastic-reduction pledge: Make a commitment to reduce your school or university's use of disposable plastic and tag another school/university, challenging them to do the same.

Spread the game of tag: Post a photo of your students or staff bringing in their reusable food containers every day and tag other colleagues, challenging them to do the same.

When you post about World Environment Day on social media, make sure to use the #WorldEnvironmentDay and #BeatPlasticPollution hashtags and mention @unenvironment.

## Did you know?

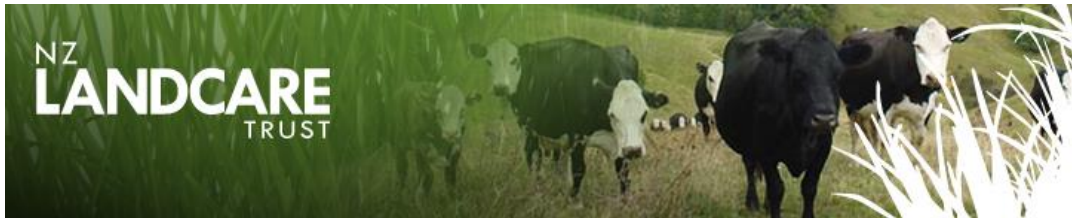
### RESERVE BANK OF NEW ZEALAND

The pattern used as a background on the \$100 is called

Whakaaro Kotahi from the Whareni Kaakati at Whakatū Marae in Nelson. Whakaaro Kotahi is a representation of the unity and consensus of the six Iwi of Whakatu Marae in the Nelson area. Rutherford identified strongly with the Nelson area and when he accepted his peerage he took the title Lord Rutherford of Nelson. He always considered this part of New Zealand home



Photo taken of display at Whakatū Marae



Here <http://www.landcare.org.nz/News-Features/Features/Launch-of-Citizen-Science-Case-Studies> you find a range of PDF that you can download with citizen science case studies over a range of topics. There is also a Landcare WebPage on Citizen Science and it is a great way to involve wider communities.

<https://www.doc.govt.nz/conservationdogs>



<http://greengrubsgardenclub.blogspot.com/search/label/Bugs>



## Activity One: Pumpkin Muffins



<https://lovefoodhatewaste.com/recipes>

Turn leftover cooked pumpkin into these delicious pumpkin muffins. They're perfect for breakfast, a lunchbox treat or afternoon snack.

### Time

- 30 minutes

### Makes

- 12 muffins

### Ingredients:

1 1/2 cups + 1 tablespoon sugar  
1/2 cup + 1 tablespoon vegetable oil  
2 eggs, beaten  
1 2/3 cups flour  
3/4 teaspoon salt  
1 teaspoon baking soda  
1 teaspoon nutmeg  
1/2 teaspoon cinnamon  
1 cup cooked pumpkin, cooled and lightly mashed



### How to make:

1. Preheat your oven to 180°C and grease a 12 cup muffin tray.
2. Combine sugar, oil and eggs in a large bowl and beat until completely mixed.
3. In a separate bowl, mix the flour, salt, baking soda, nutmeg, and cinnamon.
4. Add the dry ingredients to the sugar mixture and gently fold to combine. Be careful not to overmix.
5. Gently fold through the cooled pumpkin.
6. Spoon the mixture into the greased muffin tins.
7. Place in the oven and cook for 15 – 18 minutes or until the spring back when lightly touched.
8. Allow to cool slightly before eating.

## KĀKĀPŌ T-SHIRT DESIGN COMPETITION ENTRY

The Kākāpō Recovery Programme is joining FLOAT (For Love of All Things) to create a new kākāpō T-shirt to raise money and increase awareness about kākāpō. We would like New Zealand kids to come up with the t-shirt design. Ten dollars (\$10) from every t-shirt sold goes towards protecting kākāpō. To learn about the kākāpō, visit [www.doc.govt.nz/kakapo](http://www.doc.govt.nz/kakapo). Get creative and have FUN!



### Guidelines for the T-shirt design

Create an original kākāpō design for a T-shirt (design size 20cm by 20cm).

The winning design will be screen-printed onto the front of the T-shirt, so:

- use no more than 3 colours
- use block colours (no shades of colour)
- use bold lines (not fine lines)
- include up to 5 words.

Entries close 27 July 2018.

See terms and conditions here: [www.doc.govt.nz/kakapo-shirt](http://www.doc.govt.nz/kakapo-shirt).

### Personal Details

This form should be completed and sent to DOC by the entrant's parent or guardian.

Parent/guardian name:

Child name:

Age: 10–11  12–13  14–15

Email:

Address:

### Send your entry form and design to:

Kākāpō T-shirt  
Department of Conservation  
PO Box 743  
Invercargill 9840  
New Zealand

OR scan your entry form and design, and email them to:

[kakaporecovery@doc.govt.nz](mailto:kakaporecovery@doc.govt.nz)  
Attention: Kākāpō T-shirt

### Prizes

- The winner gets a Kākāpō Recovery Gold Adoption package.
- 1st prize in each age group gets a T-shirt.
- Kākāpō Recovery Silver Adoption package for the school with most entries!
- Lots of spot prizes.



Kākāpō in the wild. Photo: © Sandra Bennett

