

EcoBuzz

EcoBuzz Edition 63

Term 3 2016



IN THIS ISSUE:

Love Your Water

Science Fair

Fundraising ideas

And lots of counting

Love your Water and Arbor Day planting with Takaka Primary School students and helpers at Rototai Reserve.

Kia ora tatou

We are impressed with all that a teacher fits into an average week – so congratulations on your superhuman status because you still find time to read this and care about the future not just today. Why? To encourage other young people, like Earth Guardian Xiuhtezcati Tonatiuh. He is a 16-year-old climate change activist, eco-hip hop artist and change agent. Oh, and he is coming to Nelson and Tasman in January 2017. So we encourage you to have your students learn a bit about him – a truly inspiring young person. We will have more on his tour next EcoBuzz issue. Never heard of him? He spoke at the United Nations high level climate change event in 2015 and at the United Nations Leaders Summit this year. www.earthguardians.org.

In this issue, there seems to be a counting theme with several opportunities – so happy counting.

Thanks Adie, Lindsey, Karen and Claire



**WE ARE A TRIBE OF
YOUNG ACTIVISTS,
ARTISTS AND MUSICIANS
FROM ACROSS THE GLOBE
STEPPING UP AS LEADERS
AND CO-CREATING THE
FUTURE WE KNOW IS
POSSIBLE. WE ARE THE
ONES WE'VE BEEN
WAITING FOR.**

**WE ARE
#GENERATIONRYSE**

Contents

News from the Councils	3–4
Schools Taking Action	5–9
Opportunities	10–12
WES Updates	13
DOC Updates	14
Snippets	15
Activities	16–17

The Team

Tasman District Council



Adie Leng
Education & Partnerships
Officer
Ph. 543 7222
adie.leng@tasman.govt.nz



Claire Webster
Education & Partnerships
Officer
Ph. 525 0020 (ext 450)
claire.webster@tasman.govt.nz

Nelson City Council



Karen Lee
Environmental Programmes
Officer
03 546 0383
karen.lee@ncc.govt.nz



Lindsey Fish
Enviroschools Facilitator &
Nelson Regional Coordinator
enviroschools@ncc.govt.nz

‘Love Your Water’

Oliver and Sarah from Sustainable Coastlines were in Tasman in August presenting to schools about why and how everyone needs to ‘Love Your Water.’ This is their third year in Tasman–Nelson.

They also partnered with Tasman District Council for two community plantings in Rototai in Golden Bay and at the Tasman Reserve. Feedback from the teachers was very positive – even some amazement at the care taken to plant the trees lovingly and tirelessly. At Rototai some 500 plants found their new home and 300 at Tasman Reserve.

Oliver and Sarah are an engaging pair touring around Aotearoa supporting and inspiring others to care for our coasts, clean up and protect waterways and fight against plastic pollution. Look out for them next year!



Takaka Primary students at Rototai Reserve.



Tasman and Tasman Bay Christian School students at Tasman Reserve

Sustainable Living

– Schools, early childhood centres and residents in Tasman District can now access more information from the Sustainable Living website just by registering:

<http://www.sustainableliving.org.nz/Account/LogOn>

The Tasman District Council has joined the Sustainable Living Trust so those in the district have addition support to find practical and proven ways to live more sustainably.

There are eight interconnected topics with stories from residents around the country about what has worked for them to reduce consumption, improve garden efforts, upcycle, have healthier homes, reduce air pollution, to learn about eco-design and to reduce power bills and more. See <http://www.sustainableliving.org.nz/>

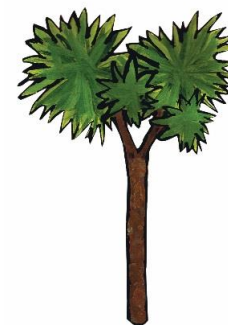
The site encourages small groups to work together and have fun to become more sustainable. Claire and Adie will be happy to help any schools or centres which have an interested class or parent group to get started and use the information available.

Council School Planting Programmes

He rau ringa e oti ai (with many hands the work will be done)

Nelson has had an awesome turnout from their schools this year to take part in the annual planting programme. Students, spades, teachers, trees and Nelmac have geared up to plant in Pipers Reserve, Orphanage Stream delta and up the Brook Valley – to name just a few places. Plantings will take place from now through to the end of term 3 in September, with pretty much every available planting day now booked – kia kaha Nelson Schools. Mauri ora Karen Lee.

Richard Hilton and Kathy Curnow wish to thank the fifteen schools who planted trees in Tasman as part of the Arbor Day programme. A great addition of over 5000 native trees.



Sustainable School Fundraising ideas



Items you can make/grow and sell:

- Spring bulbs
- Recipe books – Families are invited to submit their favourite recipe(s). You could even ask for recipes that include something from their garden if possible. Someone needs to collate these and arrange for printing.
- Calendars – from student's artwork
- Cards – from student's artwork
- Worm juice from worm farm
- Vegetable and flower seeds from the garden

Regular healthy in-school fundraisers:

- Hamburgers – wholemeal bun/lettuce/coleslaw, falafel and/or meat patty
- Baked potato (microwave first, foil and chuck on BBQ with toppings available such as grated cheese, salsa, sour cream, coleslaw etc)
- In season corn on the cob
- Popcorn
- Items you can purchase from NZ businesses for fundraising:
- 'Onya' bags for Fruit and Veg <http://www.onyabags.co.nz/>
- Bamboo toothbrushes, <http://gobamboo.co.nz/school-fundraising/>
- Ideal cups – can be school branded <http://www.idealcup.co.nz/>
- Sandwich wraps – <http://www.munchcooking.com/fundraising/>, <http://www.4myearth.co.nz>, also <http://www.gingerpye.co.nz/> will do bulk rates.
- <http://www.honeywrap.co.nz/> Honeywraps have offered a fundraising deal to Enviroschools. Selling 100 wraps at \$12/wrap will raise \$400 for your school. Or make your own, see previous Ecobuzz.
- [Www.wrapeat.me](http://www.wrapeat.me) is another sandwich wrap fundraising option for schools. Wraps cost \$8.50 and schools are recommended to sell them for between \$10-\$13.99
- Sustainable pencils – <http://smencils.co.nz/fundraising/>
- Reusable Fresh Produce Bags from Rethink This is an Australian business but NZ groups are using this product as a fundraiser <http://kiddikutter.com.au/fundraising/>
- Hungry Bins – get one for your school and pay for it by selling more and getting \$ for your school. <http://www.hungrybin.co.nz/customers/schools/>
- Soap from EcoStore <http://www.ecostore.co.nz/pages/fundraising-landing-page>

Events as fundraisers

- Bike-a-thons, Fun runs
- Bingo nights or Quiz nights
- The clothing swap evening. A fun cheap event. Gold coin donation entry. Parents/students bring along no longer wanted clothes. They are still welcome even if they have no clothes to contribute. Set up the room in sizes, with mirrors eg size 10, size 12 etc. Parents could donate towards the clothes if they chose. Everyone brought along a plate of nibbles to share and their own drinks and glass.
- Local art/craft market evening. An event that also supports the local community/business. Gold coin donation. Stall holders set up inside the kindergarten/school. They paid \$10 a stall. Stall holders also donated an item for an instant raffle.

Thanks to Dunedin City Council – Otago Enviroschools for sharing this.

Enviroschools and Department of Conservation Youth Leadership Event

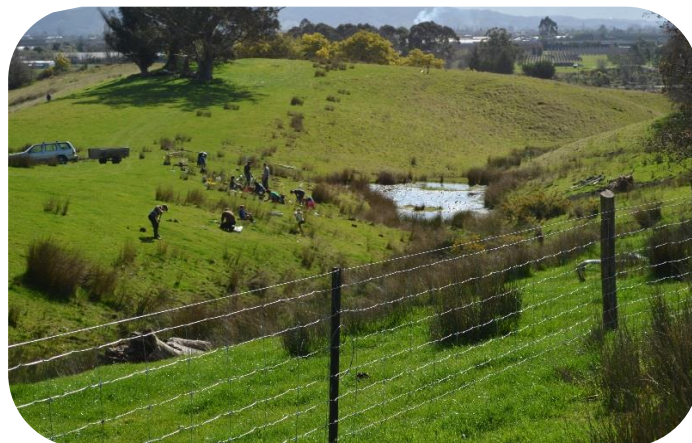
22 September at Nayland College Library ~ 9.30 am to 2.30pm

- What does it mean to be “A Leader”
- Challenges and Opportunities for ‘Young Leaders’
- What is YOUR Leading Edge? Interactive Exploration...
- Youth Leader Panel – key qualities of leadership in action
 - where leadership can take you
(careers/ community/ advocacy/ action)



Lunch Provided. Bus leaving from NCG–Rutherford Street at 8.50 am, returning to Nelson at 2.30 pm.

Register with lindey.fish@enviroschools.org.nz



Motueka Steiner School

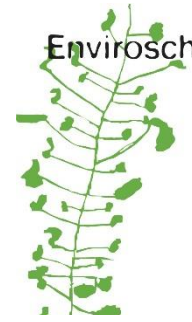
Planting has begun!



The Motueka Rudolf Steiner School children, parents and supporters held a series of planting-bees during August. They are restoring the biodiversity and fertility of the school farm. The aim is to relocate the school onto the farm and continue developing a productive biodynamic farm. The main purpose of the farm is for ‘hands on’ education and providing learning opportunities to the students and their families.

A mixed orchard was planted during August plus an area of native seedlings went into a conservation area. A gully and stream run through the centre of the farm and this is being planted in natives and returned to nature.

The planting-bees attracted children, parents and grandparents. The farm is owned by the school community but everyone is welcome to join the project of creating a teaching farm. Now that spring is here the next job is turning the winter compost piles into vegetable beds. If you would like to get involved contact the school at office@motueka.steiner.school.nz. The school Facebook Page carries regular updates and news.



Permaculture as a tool for school development at Clifton Terrace School

CTS has a small but dedicated group of teachers, parents and neighbours who are using permaculture as a tool to help us focus on how we can develop our school grounds to improve their use as part of our innovative learning environment.

Permaculture guides us by three overarching ethics: Earth Care, People Care and Future Care (sometimes referred to as Fair Share – ensuring that there is sustainable abundance for all creatures). We use this lens to ensure that any development activities take these ethics into account.

We incorporate the ideas of teachers, students, parents and neighbours into our plans and have already successfully completed a garden and seating area redevelopment. Our current project is converting an ugly, smelly, 'out of bounds', hard to maintain ditch area into a beautiful, low-maintenance, bird- and insect-friendly outdoor learning area.

We are experiencing success because:

The Board and Principal place value on it (I have a management unit to coordinate the group);

It is collaborative (parents, students, teachers, neighbours);

It is built into the learning programme (at least in my classroom!); it is inherently positive.

Permaculture in schools is often relegated to 'the school garden' but it is actually an incredibly powerful way to consider management and development of the whole school environment.

Nick Kiddey, Teacher
Clifton Terrace School



Committed neighbours

Near the project beginning and

after completion



Don't be a GOOS: make sure that there's "No Paper Going to Landfill"

Last term, Auckland Point enviorgroup students worked really hard to have "No Paper to Landfill". The group of dedicated students was concerned that, even though they had a recycling system, a lot of paper was going in the rubbish bins and ending up in the landfill. They called in the waste advisor from Nelson Environment Centre and brainstormed what they could do. They decided to closely monitor the rubbish bins in each classroom, and pull out any stray paper. Any paper that was GOOS (Good On One Side), they made into scribble pads (GOOS pads) to sell as a school fundraiser.

With help from Enviroschools, they bought new bins for reusing and recycling all their paper and put them in each classroom, labelling them clearly. They designed a Powerpoint presentation and showed it to the whole school, explaining what they wanted to achieve and why. After a few weeks, the system was running well and all the paper was ending up in the recycling bins instead of the rubbish bins. They have made their GOOS pads and are pretty happy with them. To celebrate their success, they enjoyed some well-deserved chocolate! They are determined to keep the scheme going and are keen to meet next term to decide what their next environmental mission will be!



Auckland Point school enviorgroup with their GOOS collection box

Hira children big and small explore the Glen Wetlands

We got a grant from Enviroschools to do a joint project with our local kindergarten. We decided we wanted to teach the kindy kids about our local wetlands environment at the Glen. First we needed to learn some stuff about wetlands so we went to the Glen with John Campbell from the museum. He taught us to identify some of the plants that grow well in the wetlands. He taught us about photosynthesis and how to say it! He told us about some of the birds that thrive in the wetlands. We also explored the rock pools.

Back at school we tried to simplify the complicated information we had learnt about with John. We came up with the idea of preparing a simple treasure hunt to teach the kindy kids about the different plants and birds that live in the wetlands.

On the day of our trip we picked up the dolphin group and took them to the Glen. The bus trip was a highlight for most of the kindy kids! First there was time for a play on the playground, another highlight! Then it was time for the hard work. We split into small groups and set off on our treasure hunt to explore the wetlands. The little kids raced off and were super excited to get a sticker every time they found something. They were all very keen bird spotters.

We all had a great time, the little kids learnt a lot about our local environment and we gained a lot from the challenge of being the teachers!

Photos next page

Schools Taking Action



Hira School students learn about their local wetland from John Campbell from Nelson Provincial Museum and then become the teachers themselves with the local Kindergarten.



‘Where shall this go?’

The Golden Bay Kindergarten asked for a game about rubbish, the local Kiwi Conservation Club asked for an adaption of it and then Takaka Primary had their Envirogroup play the game on stage for the whole school to see. Now other schools are playing it and KCC are turning it into a board game so watch this space – hopefully next issue we can share a new game with you all.

Albert the Albatross will be delighted if we can all stop there being little plastic things floating on the sea he mistakenly gives to Ally his baby!





Celebrate Science at Victory

Come along to find out how science is not only an important part of our daily life . . .but FUN!

Celebrate Science is a three-day event in Victory in early November. It will be a showcase for science in our region, offering stimulating fun activities for everyone.

There will be community events, school science day performances, talks and demonstrations, workshops and activities – all aimed at bringing the excitement of science alive.

Celebrate Science 2016 is being run over three days:

- **Shows: Thursday 3rd November.** The Tour De Science show, with David Klein use storytelling to tell us about science
- **Schools: Friday 4 November.** A range of interactive science activities for primary school students
- **Community: Saturday 5 November.** A free activity event for the general public, from 10 to 4pm, featuring a large range of activities for children of all ages to play and explore with science.

The theme for this year's event is The Elements Earth, Fire, Water and Air.



Young Birders New Zealand

Kia ora, My name is George Hobson, and I am one of the 5 young people running a new organisation called Young Birders NZ. We are passionate about our native flora and fauna. Our main objective is to get the young people of New Zealand into birding and other nature related activities and to help them meet other people their age with similar interests.

We put out a free online magazine every two months called Fledglings NZ, two most recent mags: <https://joom.ag/vzPQ> and <http://joom.ag/VbWQ> filled with information on birds and birding, and we are hoping to run field trips for our members in the future.

If your school or ECE centre would be interested in being on the mailing list for the magazine, please send me an email at george.hobson@youngbirdersnz.com

We love to provide memberships to classes, or even whole school or centre!

George



Solar Buddy – helping others

Email enquiries@solarbuddy.org

www.solarbuddy.org



Children may only make up 20% of our population ... but they are 100% of our future

SolarBuddy.org created the Buddy2Buddy Schools Solar Program to connect school communities who want to make a difference with other children and communities in areas throughout the world that live in energy poverty.



Purchasing and building a 'SolarBuddy' light at school teaches children about the positive impact of renewable energy on communities living in energy poverty. Sending that light to a child in need, along with a personal letter, can make a huge difference to their life.

Our aim is to involve as many schools as possible in the Buddy2Buddy program on an ongoing basis. We want thousands of schools across the world to give the gift of light to others every year, helping to end energy poverty one community at a time.

Schools in Australia and China have already sent lights to communities in Uganda, Somalia and Papua New Guinea, greatly improving the lives of hundreds of children.

For more information, or to get schools in your region involved please contact:

Kate Rowland m: +22 108 4318 e: kate.nz@solarbuddy.org

Local Technology in future focused action - Evolocity and Aquabots Programmes

Evolocity and Aquabots are two educational programmes available in Tasman and Nelson that integrate Science, Technology, Design and Engineering. They provide students with a creative, competitive opportunity for practical and collaborative fun that considers sustainable options. The student teams each get a basic kit supplied and then the creation begins. The Ministry for Inspiration brought Aquabots to New Zealand in 2013 and the winning team has a chance to compete in the American MIT Sea Perch competition.



An AquaBot is a remotely operated underwater vehicle (ROV) that students design and build using the supplied kit. They have great fun (and patience) to develop operating skills to achieve the requirements of the competition:

<http://ministryofinspiration.org/page-1623829>

Students from the various schools attending MOTEC (Motueka Technology centre) are being given the opportunity to build and trial their robots to compete early next term in October.

Two teams from Waimea College and four teams at Motueka High School will be entering the Evolocity competition with their own electric vehicle that they have created this year.

Evolocity develops team work and innovation even further using a basic kit that is supplied for student teams to create their own electric vehicle. Evolocity is intended to provide experience of the engineering process, see <http://evolocity.co.nz>



EVolocity helps address the issues around Sustainability, stimulating technological innovation that can contribute to a more sustainable future with lower fossil fuel emissions.

Teamwork, design, mechanical engineering, electrical engineering, IT power electronics, assembly and effectiveness, documentation and effective communications are all needed to compete against other teams in regional finals events. Winning teams move on to the national finals.

EVolocity National Finals, November 27, A&P Showgrounds, Christchurch featuring the best teams from Waikato, Nelson and Canterbury. The organisers are very exciting about the activities that will be showcasing engineering:

- [Powertool drag racing](#). Build your own and compete. Details coming soon.
- Electric grass karts. Kids can jump in and drive. (Trained operator in passenger's seat.)
- Solar mini racers. Open to the public. Competitions throughout the day.
- Radio control car racing. Demos, plus opportunities for public to compete.



Golden Bay schools contact Terry Lynn Burgess 525 7422.

Look up <http://www.knzb.org.nz/cleanupweek> for what's on elsewhere.

The Great Kiwi Bee Count

NZ Gardener is working with the scientists at Plant & Food Research to conduct the inaugural Great Kiwi Bee Count – and we need Kiwi kids to take part!

The Great Kiwi Bee Count is like a bee census and the aim is to build up a more detailed picture of the range and behaviour of some of our key bee and other pollinator species.

The Count runs until the end of September. Participating is simple and it takes just two minutes (but you do need a smart phone or device).

Go to stuff.co.nz/GreatKiwiBeeCount and you'll be asked where you are, what the habitat and weather is like and what kind of flowering plant you are observing: an edible, an ornamental, a native or a weed (plus the name of the plant, if you know it).

Then you just need to watch the plant for two minutes and record how many of the 12 bees and pollinator species we are surveying. There are ID shots of the different bugs included to assist our citizen scientists tell the insects apart. In fact, it's a great tool if you are teaching kids about insects, pollination or explaining how plants grow.



The Great Kererū Count

The Great Kererū Count is the largest national citizen science project to help gather information on the abundance and distribution of the New Zealand Pigeon — also known as kererū, kūkū or kūkupa.

The Great Kererū Count will take place over 10 full days from 16 to 25 September 2016. So get ready to get out and about and make your kererū count.

This year they have 3 options available with multiple ways to make your kererū observations, for more information see

<http://greatkererucount.nz/how-to-count/>

The website also has resources to download to help you with your count, as well as links to other useful sites.



Make a kererū protector

Kererū don't see windows – and sometimes fly right into them! That can injure or kill them. Help them by putting decorations on your windows to show them something's there.

You need:

- Plastic wrap
- PVA glue
- Poster paint or food colouring



- 1 Mix glue with just a little bit of paint or food colouring. Make as many colours as you like.
- 2 Paint a picture onto plastic wrap – not TOO thick or it will take ages to dry.
- 3 Let your picture dry completely. Be patient!
- 4 When dry, pop your picture in the freezer for about 10 seconds.
- 5 Take your picture out of the freezer, and – very gently – peel it off the plastic wrap.
- 6 Press your picture onto your window and admire.
- 7 Make more!



Text: Johanna Knox and Tiff Stewart
Photos: Tiff Stewart
Thanks to our artist, Kaela.

Window strike

That's a technical name for when birds fly into windows. It usually happens when birds can see in one window and right out another – or when they can see sky or trees reflected. Look around your house to find the windows that birds like kererū are most likely to crash into. Make your decorations for those.



Story of Stuff working on the new threat to our oceans –PLASTIC MICROFIBERS!

Story of Stuff* needs your help to get another mission off the ground, solving a pollution problem recently discovered: plastic microfibers. https://action.storyofstuff.org/donate/microfibers_film/

Synthetic clothing fibres, less than 1 mm in size, discharged from clothes washers, through water treatment and into the environment have been found to cause widespread microplastic pollution on shorelines and coastal waters around the world. A single fleece jacket can release as many as 250,000 plastic fibres per wash load!

The small synthetic fibres attract the toxins in the water around them, accumulating harmful chemicals that are then passed into small organisms eaten by small fish. Bigger fish eat the smaller fish -- and we eat the bigger fish, so the problem affects marine life and us humans.

The great news is scientists and others have already begun to figure out how to solve this problem, with ideas ranging from reformulating the materials used to manufacture garments to using filters in washing machines to capture the fibres. Surely if we can figure out a way to make a fleece out of recycled plastic bottles we can figure out a way to keep the plastic in those garments from reaching our waters.

*Story of Stuff is the global community with a million members that played a major role in helping to solve the problem of microbeads found in personal care products -- by passing legislation outlawing them in the US.



Nice idea for a recycling station.

(Note: objects are visible as examples as well as having written labels)

A visit earlier in the year to Waitakere zero-waste learning centre was fabulous—it had a classroom, an outdoor garden with heaps of activities, and a “Make Space” workshop which was equipped with real tools and where the children could make durable things out of waste rescued from the transfer station. Would love to see something like this in our region!

Conservation Week Event

Tinline Trail - Sunday 18th September 2016, 10am-2pm

Take the family on a walk of discovery along the Abel Tasman Coast Track from Marahau to Tinline campsite, and take part in interesting activities along the way.

Unpack your picnic at Tinline campsite where the kids can enjoy fun activities and find out all about birds and bugs, plants and pests, camping and tramping, seashore and forest floor. Learn about nature, and find out where you can take the family for easy adventures.

Children aged 6–10 years can earn a Toyota Kiwi Guardians Medal by taking part in the activities. There will also be a quiz for adults to complete to go in the draw for a fantastic prize.

An adult would walk the distance in 30 minutes, but with young children it would take more like 45–50 minutes.

The track is suitable for buggies, but bikes are not permitted.

Postponement date: Sunday 25 September 2016

For further information, contact Kath Inwood – kainwood@doc.govt.nz

Brought to you by DOC, Project Janszoon, and Abel Tasman Bird Song Trust, with support from Bowater Toyota.

www.doc.govt.nz/news/events/conservation-week/



Children aged 6–10 years can earn a Toyota Kiwi Guardians Medal by taking part in the activities – pick up information on this at the Marahau kiosk on the day.

Young Reporters for the Environment Competition

This national eco-journalism competition is open for all 11–18 years old's living in New Zealand. It is an internationally adopted programme that gives New Zealand youth the opportunity to produce creative and engaging environmental journalism articles, photos and films.

Entries close October 28, 2016

Participants are split in to two categories based on their age:

1. 11–14 and 2. 15–18

There are 3 x categories with a prize for each age group up for grabs in each:

1. Photography
2. Film
3. Writing

Each participant needs to select an environmental topic and investigate it.

They then need to report on the environmental issues surrounding their topic, and propose solutions, by using either video, photography or writing. <http://www.knzb.org.nz/yre-nationalcompetition>

This year's themes are: Litter/waste/recycling, Biodiversity, Climate Change, Water, Coastlines and Energy.

Show us the best in youth-led environmental journalism for a chance to win.

Students who place first in their medium will receive vouchers for electronic gear and the opportunity to spend a one-day internship in a New Zealand newsroom shadowing a journalist. Winners will also be published online and automatically be considered for the YRE International competition.



Kiwi eco-warrior set to travel on trash down the Mississippi

Two young Kiwis are taking a stand against waste, turning trash into a boat to sail down one of the world's longest and most polluted rivers. ["No waste" journey attempted](#)

Students compete to create the ultimate compost

Nelson Marlborough Institute of Technology horticulture tutor Don Cross has organised a compost-making competition for his students to expand their knowledge of soils. [Prize to the pile with the most bugs!](#)

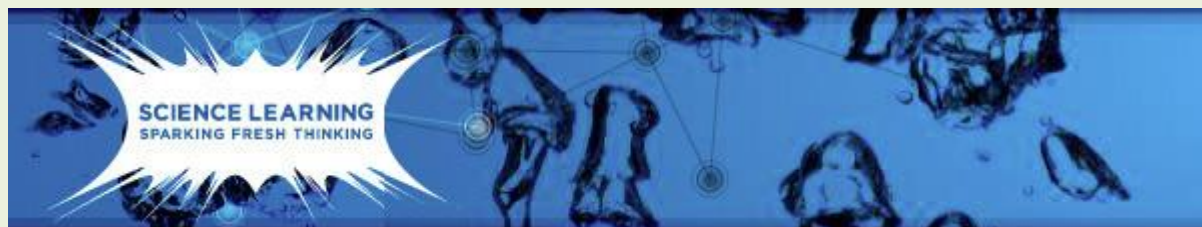
Plastic Diet is a youth-led organisation dedicated to reducing single-use plastic waste and consumption. They powered the recent Plastic Bottle Kayak Expedition! <http://www.plasticdiet.org/>



EVolocity National Finals, Nov 27, A&P Showgrounds, Christchurch

This year's big event will be quite different from those held the past 2 years. Branded [EVolocityFESTT](#) it will feature the best teams from Waikato, Nelson and Canterbury and will include some activities designed to showcase how exciting the field of engineering can be:

- [Powertool drag racing](#). Build your own and compete. Details coming soon.
- Electric grass karts. Kids can jump in and drive. (Trained operator in passenger's seat.)
- Solar mini racers. Open to the public. Competitions throughout the day.
- Radio control car racing. Demos, plus opportunities for public to compete.



Conservation Week is 10–18 September. The great outdoors doesn't have to include bus hire – the school grounds and an online eco-challenge are great places to start.

Try one of the following activities.

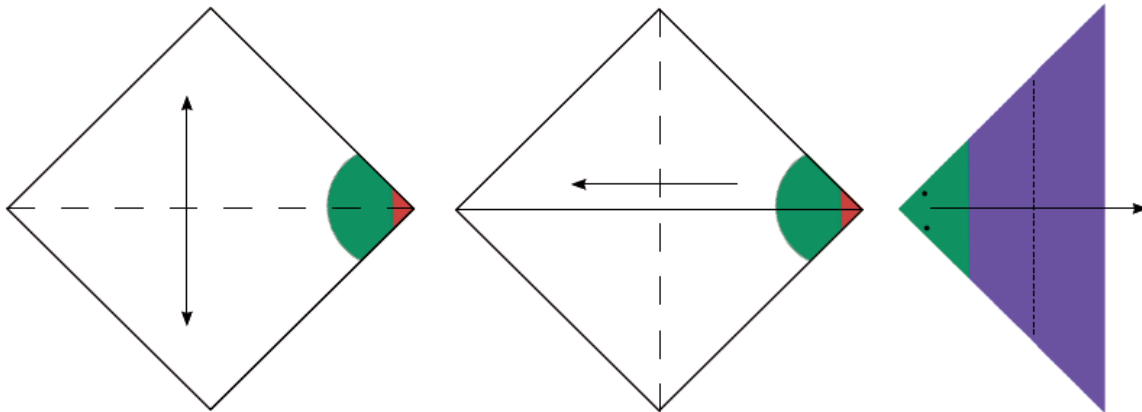
Create a lizard-friendly habitat. Make a tracking tunnel. Observe an earthworm.

Make a biodegradable possum bait station. Conservation ethics - using ethical frameworks in the classroom.

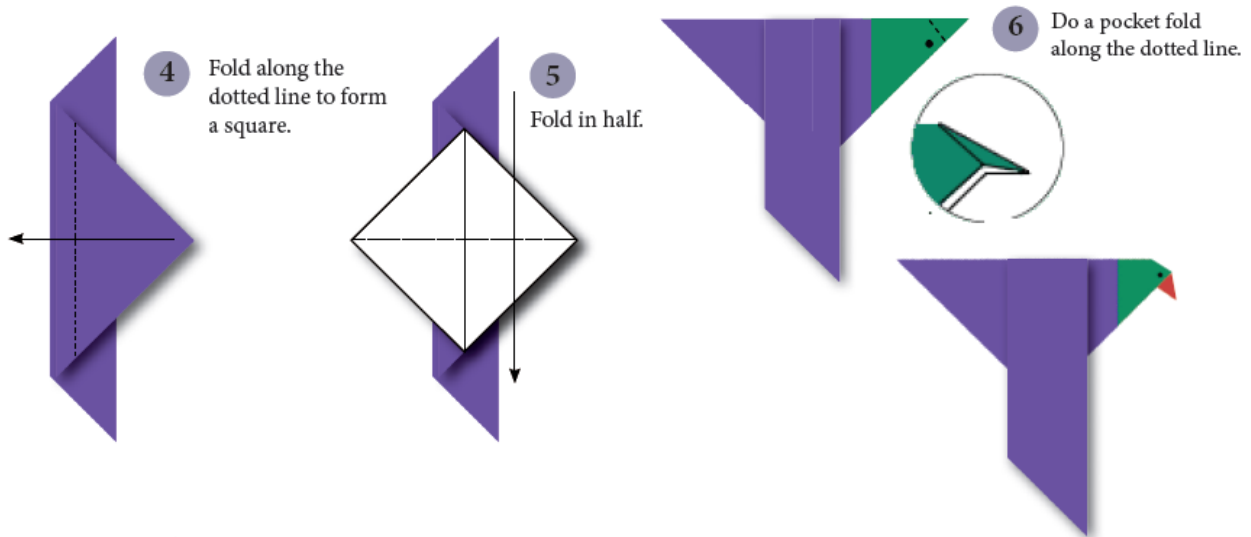
All these and more on www.sciencelearn.org.nz

MAKE AN ORIGAMI KERERŪ

Either print the origami kererū pattern or cut a piece of paper into a square and start folding! **Don't forget to share a photo of your folded kererū on social media using the #greatkererucount hashtag!**



- 1 Arrange your paper so the red triangle is pointing to the right. Fold in half to make a crease and fold back.
- 2 Fold in half again horizontally.
- 3 Fold along the dotted line.



THE *Great Kererū* COUNT

