

EcoBuzz

EcoBuzz Edition 52

Term 4 2013



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Nelson Intermediate School develop an orchard to supply free food for students

Kia ora tatou

The internet is vast, so vast it can be overwhelming. Yet there are many wonderful sites to be found. 'Soulpancake' (www.soulpancake.com) is one such site – check out this link to the 'Science of Gratitude' and then there is 'Upworthy' (www.upworthy.com). Neither of these sites is particularly environmentally focused – they are really 'positivity' focussed and just as important. There is also our locally created Happyzine

(www.happyzine.co.nz)- perhaps you have something to contribute? If we don't feel positive and able to be part of making a real difference how do we expect our young people to be able to this?

Within these pages of EcoBuzz are some truly wonderful examples of young people making a difference to their world. Our thanks to you for helping make this happen – it wouldn't happen very often without the determination and dedication of you, the teachers.

Thanks Richard, Lindsay, Rob, Adie and Claire



"The more our human world functions like the natural world, the more likely we are to endure on this home that is ours, but not ours alone."

~ Janine Benyus

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Tasman Nelson Environment Awards 2013



The Tasman Nelson Environment Awards is a two-yearly event organised by Tasman District and Nelson City councils that recognises and rewards the efforts and achievements of people in the region in improving and sustaining our natural and people environments. The Awards give us an opportunity to celebrate positive environmental stories across the region.

This year the Schools category of the Awards was run in collaboration with the Cawthron Nelson Science 7 Technology Fair during September.

Ten entries were judged for the Primary Award and eleven for the Intermediate/Secondary Award. The criteria that entries were judged against are: sustainability learning; empowered students; leads to sustainable communities; and the clarity of project objectives and presentation. Students were then interviewed to assess the process students experienced to gain knowledge about a local environmental issue and their use of best practice to implement/maintain sustainable action(s) to address the issue.

The winners are:

Charlotte Halsey of Nelson Central School with 'Exhausted Oceans' – Winner Primary
Room 4, Tasman School with 'Muddy Buddy' – Co-winner Intermediate/Secondary
Nelson College for Girls Enviro Action Group with 'NCG Thrift Shift' – Co-winner Intermediate/Secondary

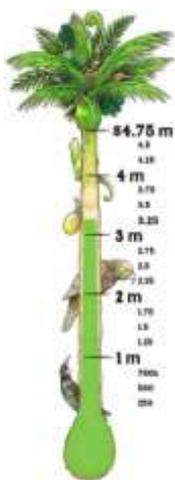
The Nelson Marlborough Institute of Technology sponsored the Schools Environment Awards (for \$500 for each category) and presented the three winning schools (Tasman School, Nelson College for Girls and Nelson Central School).

The 2013 Nelson A&P Show Richmond Showgrounds

Saturday 23 – Sunday 24 November 2013, 9.00 am

A Kiwi tradition, the A&P Show has something for everyone including live entertainment, livestock competitions, shearing, wood-chopping, agricultural demonstrations and displays, carnival rides, side shows and trade exhibitions.

Ph. 03 544 7181 aap@xtra.co.nz



Save Our Babies – Get Behind The Fence



Pests such as rats, stoats and possums are killing our baby native birds and animals, and species are going extinct. Now you can help stop this tragedy.

The Brook Waimarama Sanctuary is building a 14km pest-proof fence in Brook Valley, Nelson, which will create a 700 hectare protected nursery. When completed it will allow native birds and animals to flourish behind the fence, and spread throughout the region and back into our lives.

Get behind the fence! Sponsor one (or more) of the 7000 fence posts required to complete the project, and help save the babies!

Fence post sponsorship pricing ranges from \$100 to \$5000.

Conservation Week

This year the Department of Conservation took a partnership approach to celebrate Conservation Week. The theme ‘What is your whanau doing’ called for involvement of families and children and DOC created many opportunities to participate and to learn how we all can contribute to conservation.

The Conservation Pledge Tree in Libraries

A beautiful, albeit bare tree was shown on a poster that was surrounded with photos of people active in conservation and restoration. Children and families were then encouraged to put up their ‘pledge’ in the form of a green leaf; as the pledges were growing on the tree it gained a green and happy appearance.

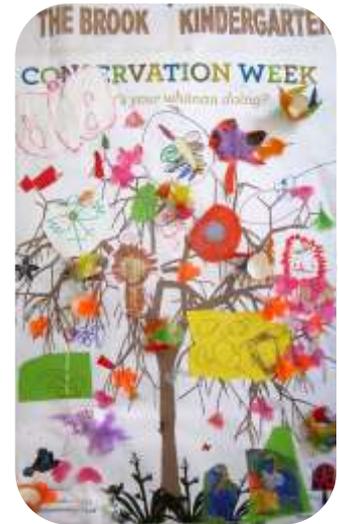
Pledges put up included planting trees, hugging a tree, learning bird calls, getting a worm farm, going for a walk on the beach, learning about native trees, picking up rubbish and many more.



Families exploring new recreation options at the Anchorage Fun Day



*Above - Child's Pledge to Tangaroa
Right - These children took their own creative approach to filling the tree with their love and commitment.*



Anchorage Family Fun Day

In partnership with Sports Tasman and the NZ Marine Studies Centre, DOC staff designed a day that allowed families to experience a mix of conservation and recreation activities in a fun and easygoing setting. They held their fun day at White's Bay and the Nelson/Tasman team took families into Anchorage Bay in the Abel Tasman National Park.

Local business sponsors joined in with Sea Shuttle to subsidise a fantastic boat ride to Anchorage in Abel Tasman National Park and Abel Tasman Kayaks dedicated staff and boats for the day, while the Abel Tasman Birdsong Trust provided a ‘pest control’ walk and opportunities to get involved. A sand sculpture competition and a conservation exploration booklet suited those families with younger children who wanted to simply roam and have fun. Both fun days attracted up to 100 people to each, most were families and the feedback was unanimously positive. Quite a few families had never been to these locations and were keen to take their children back for more explorations.



Never too young to learn! Participant in the Marine Metre Squared Exploration



What is your whanau doing..? Pledges growing leaves on the Conservation Tree

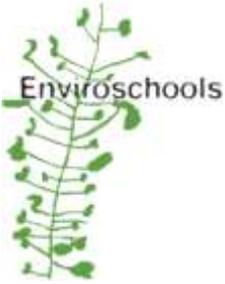


Young creator with his family's sand sculpture

Working with a range of new and existing partners brought new life to Conservation Week and made it a lot easier to get interesting action that reached out to new audiences. “Ma tini, ma mano, ka rapa te whai” ~ By joining together we will succeed.



Department of
Conservation
Te Papa Atawhai



Marlborough Enviroschools inspire teachers

In Term 3, 20 teachers and principals from Nelson and Tasman schools were invited to visit 3 of Marlborough's 25 Enviroschools.

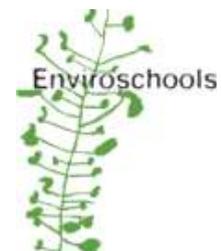
The most was made of every minute of the day starting with a Department of Conservation quiz with prizes on the bus and opportunities for networking. Fairhall, Renwick and Springlands schools kindly hosted us and their students showed us their environmental action projects. Lead teachers at the schools explained their Enviroschool pathway and shared the ways in which they have integrated the Enviroschool Programme into their curriculum. Teachers commented on how strong the student voice was in the schools, in line with one of the key Enviroschool principles of empowered students. It was exciting to see how embedded the programme was in the practices and programmes in all 3 contrasting schools. We saw a range of awesome ideas of action, including waterway restoration initiatives and the successful Fish on Drains project, reminding us to dispose of pollutants responsibly. We all returned brimming with inspiration for

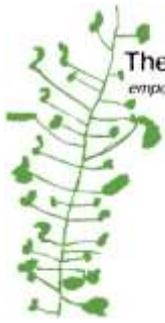


deepening our environmental practises and ideas for our next steps.

With thanks to Annie MacDonald at Marlborough District Council and the Enviroschools Regional Capacity Fund for funding the day including teacher release.

If you would like to find out more about the Enviroschools programme in Nelson please contact Lindsey lindseyfish@xtra.co.nz / 0211460247 and in Tasman please contact Adie adie.leng@tasman.govt.nz / 03 543 7222 or Claire claire.webster@tasman.govt.nz / 03 5250020 ext 450.





The Enviroschools Foundation
empowered students...sustainable communities

Enviroschools National Report

For anyone who remembers or featured in an Enviroschool scrapbook, these have now been replaced with a national report featuring a double page spread for each region. Your facilitator will issue a copy for each participating school or kindergarten.

Changes to the Enviroschools kit

The “Reflect on Change” section of the kit has been updated. All schools/ECE with the kit will need to replace it. Your facilitator will be visiting you shortly with the new section which we ask you to insert and remove the old one. You will notice the main change is the replacement of the ‘Awards’ process by a holistic reflection process based on sharing and decision making sessions.

Welcome to... Nelson College for Girls Prep School

who have joined the programme. We look forward to joining them on their journey towards greater sustainability awareness. They are our second Intermediate school in the region to become an Enviroschool.

Coming this term...

Your facilitator will shortly be contacting all lead teachers to reflect on the current year and set goals for 2014.

Nelson KIT AND COFFEE

The next kit and coffee session will be on:
Wednesday 20th November
At Founders café: From 3.30–4.30

Focus: Reflect on change part of the kit which you may wish to use with the Envirogroup to mark the end of the year. These sessions are free and open to all teachers in Nelson Enviroschools and ECE Enviroschools. They will offer an opportunity to network with fellow teachers and to increase your kete of tools by participating in activities from the Enviroschool kit whilst having a relaxing coffee.

Please contact Lindsey Fish to register.
lindseyfish@xtra.co.nz / 0211460247

Coming in 2014...

The focus for Nelson Enviroschools in 2014 will be a deeper understanding of sustainability and deepening practice. In term one we plan to offer a teacher hui exploring the question, “what is sustainability?”

In recent years we’ve held a youth hui, a residential teacher hui and two bus trips. Now it’s the turn of primary and intermediate schools once again. Watch this space for details of a fun packed Big Environmental day out in term one!

Contact me if your school would like a “Sustainability in our backyard” workshop at a Staff meeting in 2014. The 1 hour workshop is full of fun ideas to take back to the classroom around ways for students to connect with nature without having to leave the school grounds. We are also offering whole staff workshops on teacher only days which may be especially useful when planning a whole school theme.

Contact me for details

Kia Ora Lindsey Fish

Inspirational learning...In the Spotlight (Nelson South Kindergarten and Nelson Intermediate both feature!)

Look out for our local schools featured in the new section in the Enviroschools website called ‘In the Spotlight’. <http://www.enviroschools.org.nz/in-the-spotlight> and <http://www.enviroschools.org.nz/in-the-spotlight/kai/projects-case-studies> This is what it says, ‘Throughout Aotearoa and Te Wai Pounamu, tamariki and students are connecting with our land and people, and are working on inspiring projects that are helping to build and create more sustainable communities. Here we put the spotlight on some of the fabulous learning and actions that are happening in the Enviroschools and Te Aho Tū Roa network. We are hoping to draw in examples and resources to both inspire and help build on our Puna Mātauranga /Pool of Knowledge.’ The first spotlight is on Kai.

Salisbury School's Mara Rakanui Lizard Sanctuary

Salisbury School has been lucky enough to be given \$10,000 from Kids Restore NZ to help develop a Lizard Sanctuary on the school grounds.

The site for the proposed garden was a shrubby border of no real merit. In order to allow year-round, all-weather access, we are building a wheelchair assessable boardwalk through part of our existing native bush and into the lizard sanctuary.

Our design represents a snapshot of our local lizard habitat, from the sea to the mountains. The concept incorporates elements of our region: local stone and plants (some of which are regionally rare); and shapes and objects reflecting our local environment. Re-use and recycling are part of the design ethos and reflect Salisbury School's EnviroSchools Green/Gold Status.

Above right Board walk completed during the holidays and is wheel chair accessible.

Right: Ashlee helped put up a fence for the entrance and was learning how to use tools.

Plants create the foundation structure of the lizard garden with the provision of twiggy, divaricating species, taller trees with branches for protected perching, and those that will generate leaf litter and debris on the ground for protection and habitat for fodder insects. The choice of plants reflects the desire to provide a continuous food supply year-round for both lizards and their prey. Rocks, tyres and logs will provide heat sinks and a range of habitats.

We hope that schools in the local area will feel welcome to access our native garden for educational purposes as this was the wish of the students who came up with the design back in 2004.



Congratulations to...Nelson South Kindergarten:

who were recently named as winners of the Mother Earth Award. The award is open to EnviroSchools and setup to recognise New Zealand schools promoting wholesome food and healthy eating to families and communities. It seeks to identify and reward unique projects which make a real difference to their communities. The Judges said...

"A lovely project that really embraces the multi-ethnic community the kindergarten is a part of. Getting the parents and others outside the kindy involved is a really good community aspect. Kids and adults alike can learn about eating well if they carry out all of their plans".

View winning entries at:

<http://www.motherearth.co.nz/reward/2013-winners/>



Etenei is on the left, Tory on the right and Devlin behind. They had been planting carrots, radish and spring onion having weeded, dug in some compost, then planted and watered. The day before that they were planting sunflower seeds. Etenei had been listening well and remembered the process and said, "Plant, plant, plant, Water, water, water, Watch, watch, watch, Wait until it grows."

After the holidays they were very excited to find tiny carrots and radishes growing, peas growing well and broad bean flowers turning into beans! They are working on getting their Community garden started, then the cooking classes. A big water tank coming up also for the community gardens.

Schools Taking Action

As part of the Kids Edible Garden programme the students of Victory School have been very busy this term getting the soil ready for spring. They've been digging in the winter green manure, feeding and working the soil. The students have been learning about companion planting and transplanting self-seeding borage, nasturtiums and calendula from the Community Gardens. For their cooking session, they made spring rolls stuffed with veggies they had grown. They shared them with their class and the teacher used them as a lesson in mathematical fractions!

The students have planted seedlings donated by Mitre 10. On learning how to plant seedlings one student asked "Why does the soil need to touch the roots—is it because the roots need to touch the food in the soil?" Another student commented: "We had to plant the same plant 3 times to get it just right. I had no idea it was so difficult planting stuff!" When asked what they like about KEGS. "It's fun and exciting and we get extra food!" they said. The value of the programme is recognised throughout the school and the links with the Community Gardens worm farms and composting is vital for keeping a huge amount of food scraps out of the skip!

Victory School: It's Spring—time to get planting!



Planting lettuces, chili peppers, and tomatoes



Nelson Intermediate: Planting time!

At Nelson Intermediate School, huge changes are underway. A joint enviroschools /KEGS project resulted in 32 fruit trees being planted to grace the rather barren school grounds, providing shade, fruit and beauty!

As part of the envirogroup's vision for the school, a large space has been allocated for a new whole-school garden. The envirogroup have been the drivers of this exciting new venture and have gained support from iwi to build some raised garden beds. Bunnings have also spent funds on building a storage and seed propagation shed, more garden beds, a large composting system and a fence. They will supply all the materials and the labour. This is a huge gift to the school and will get the new garden up and running with a hiss and a roar! The school plans to make the garden a learning area, it will be used by science and food technology teachers and other teachers wanting to use the garden as their living curriculum, in the true spirit of enviroschools.

This term, the KEGS students have done lots of measuring and planning for the new gardens and trees. They have learnt how to plan a garden according to the seasons, test the soil, propagate strawberries by division, use mulch, and they have made garden sprays from natural ingredients.

When asked what they had learnt: "how deep to plant each seed, how to make pots from paper, what seeds need, etc. One boy had never planted seeds before and was very pleased with his new-found skill!



Top Left: eating raw broadbeans, pods and all!

Left: Making seed pots from newspaper and filling them with seed mix, ready to plant sunflowers, lettuce, and courgettes.

What else is happening at Nelson Intermediate school...?

They are developing an orchard to supply free lunch for students

Three students from the envirogroup developed an innovative idea to grow and share food with their class mates. When the project, called 'Fresh On Our Doorstep' (Food), grows to fruition, students will be able to pick their own healthy food from fruit trees dotted around the school.

Kate Silk, 13, Jazmin King, 12 and Nicole Goldsworthy, 13, are behind the original idea of which was developed by last year's envirogroup. The girls had a good appreciation and knowledge of making the most of our land, and all had previously been at primary schools in the KEGS programme as well as at Nelson Intermediate School.

"We always forget our lunches and we wanted something to eat," Nicole said,

The trio said they were proud to think that their idea meant other students would be able to harvest their own free food from trees on the school grounds. After soil testing and designing the orchard with their Kids Edible Garden Facilitator Faye Vaughan, as well as canvassing which fruit trees student wanted to eat, pupils dug up unused portions of the school grounds to plant a citrus grove of orange and lemon trees. Other fruit will include apples, berries, feijoas, nectarines, apricots, almonds and hazelnuts.



Enviroschool's lead teacher, Lisa Hunter, said each class had a chance to help with the planting so that the whole school felt a personal connection to the project. Kate, Jazmin and Nicole had to make a formal application to the school board to request use of the spaces around the school. They had to write a letter and present a map marked with the proposed locations for the trees. The project was approved last term, and funded with a \$500 grant from the Nelson Enviroschools Environment Action Fund. The fund also gave \$500 for a water catchment tank to be built next to a vegetable garden planned for behind the school gym.

"This is their voice and what they learned is that it doesn't matter how old you are, you still have a voice," Mrs Hunter said.

She said every school had a few students who came to school hungry for one reason or another. She also thought the initiative would help educate the students.

"With the price of food these days, either you can't buy it or you don't know where to get it. We want to open it up."

Mrs Hunter said the students planned to plant feijoa trees close to the walkway by the Railway Reserve so that the public could help themselves. With thanks also to the Nelson Environment Centre and Nelmac.

Big Beach Clean-up

A big community spring clean of Tasman Bay beaches and other coastal areas between Marahau and Cable Bay is planned in time for summer.

When: Saturday, 9 November 2013

Time: Start as early as you like but be aware rubbish collection points are only open between 10:00 am and 1.00 pm..

Where: Marahau to Cable Bay (approximately 50 beaches)

Department of Conservation, in partnership with Nelson City Council, Tasman District Council and Nelmac, plan to run another Big Beach Clean-up on Saturday 9 November 2013 and are seeking groups who participated last year to sign up again.

Last year over 500 volunteers collected 6 tonnes of rubbish from a staggering 293 kilometres of beach between Cable Bay and Abel Tasman.

The plan is to run the project on much the same basis as last year with interested groups invited to visit the DOC website and register. There you will find maps and information on how to get mobilised.



Department of
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Schools Taking Action

Hampden Street School

Over the July holidays, the gardens underwent a complete makeover! Using the \$500 available through Enviroschools, the

facilitator, lead teacher and caretaker replaced the existing garden beds with new, much higher ones, filled them with new soil, and created a space for a potting table. Now the gardens are full of potatoes, strawberries, beetroot and lots of brassicas. There is even a wheelbarrow planted in one of the beds. "That's because we have planted kumara in that bed and kumara needs a hard surface to grow against", said Grace, the facilitator. In another bed, a scientific experiment is underway, trialling 4 different varieties of potatoes, grown in 4 different ways! This will be a good story to share with their classes! Another way the garden is linking with the classroom is the case of the Pink Pikelets. One small girl, a beginning reader, has difficulty differentiating her p's, d's and t's. So she made her own reading book, *The Pink Pikelets*, all about the beetroot pikelets she made from the garden. This has made a big difference to her reading skills!

Growing seeds has also been a focus this term and 4 polystyrene boxes are now full of seeds for the school gala next term. The kids made delicious pumpkin soup for their cooking activity and washed the seeds to dry and grow more pumpkins. Check out their blog: <http://hssenvirogroup.blogspot.co.nz/2013/09/kegspassion-groups-pumpkin-soup.html>

The school is totally committed to its garden and knows the value of the gardening programme for the school; to spread the message to the wider community, the lead teacher is running a home garden competition in December.



*Working hard
in the new
garden bed*



*Planting carrots
inside seed
tapes to space
the seeds.*

Disaster struck the garden in the July holidays. Vandals pulled up absolutely everything! A real testament, then, to the value the school and the kids have put on their garden that, within one week, the KEGS facilitator had replanted what was salvageable and the school had bought new plants for the kids to plant.

In early September—the garden is flourishing with 3 new garden beds, a large strawberry patch, a big plot of sweet peas, and veggies galore. The compost bin they built last term has provided 2 loads of compost for the new garden beds. The worm farm is really healthy now and the kids enjoy looking after the worms.

The children have harvested swan plant seeds and sunflower seeds they had grown last year and learnt how to get the kernels out to eat. They also made seaweed stew as liquid feed. The children recently made pikelets with violas and roses and rosemary buns: YUM!

Asked what they like best about gardening, the kids replied "It's fun getting your hands dirty and we can come and eat food at playtime and can cook food too! One student said "I don't have a garden at home so it's great that I can garden at school and learn how to grow stuff!"

Auckland Point School



Harvesting giant sunflower seeds from last year's crop

Kids Edible Gardens in Schools Programme Update

At the end of June, I took over the role of coordinator of the Kids Edible Gardens in Schools programme, replacing Fay Vaughan and currently supported by Nelson City Council. Currently, four schools are participating in the programme: Auckland Point, Victory, Nelson Intermediate and Hampden Street schools – each school features in the ‘Schools taking action section’. We also support 8 schools that have previously been part of or closely associated with KEGS and are actively running gardens by providing seeds and plants if we have surplus, and inviting them to our KEGS facilitators’ end of term meetings.

Last term was mostly spent in meeting lead teachers and facilitators, preparing funding applications, and seeking supplies for the gardens. The KEGS facilitators were busy showing students how to prepare the soil in the garden beds for planting seeds and seedlings.

We also offered a workshop “The Basic Ingredients of a Garden” to support early childhood centres and schools in beginning or re-establishing their edible gardens. Part of this workshop was to encourage garden facilitators meet regularly and support each other in knowledge and resources. The workshop was delivered by Fay Vaughan and was well received.

Thankyou! Huge thanks to Egmont seeds in Taranaki who have supplied the schools with an impressive amount of free seeds. Thanks also to Bunnings, who have signed up to donate and build a garden shed, raised garden beds, a large wooden compost system and a fence for Nelson Intermediate School’s large new garden, which has resulted from the envirogroup’s vision for the school. Mitre 10 continues to provide us with free seedlings.

My thanks also go to all the dedicated and hardworking facilitators and teachers for their input into this valuable programme!

Funding: We are having problems securing funding for 2014 and beyond, but are continuing to apply, as demand for the programme is growing. Any support from participating, or new, schools, for this fundraising/sponsorship effort would be appreciated to help secure the programme longer term. Please contact me if you have any thoughts/suggestions.

Every time I observe the facilitators working with the students, I’m impressed at the enthusiasm, skills and knowledge that the kids are gaining through the experience of working alongside an expert gardener. Students who have difficulty focusing inside the classroom often excel in hands-on learning in a real context and this is very obvious to see.

Waste Education Services for schools (WES)

Planning any waste education for next year?



Want to take the next step to reduce waste at your school?

Waste Education Services is a free programme (funded by Nelson City Council) and run by Nelson Environment Centre. The WES facilitator is available to work with all Nelson schools and ECEs.

Whether it’s:

- refreshing your school recycling system,
- doing a whole-school waste audit,
- creating waste-free policies
- getting rid of lunchtime waste,
- learning how to shop smarter
- setting up compost and worm farming systems to deal with food and garden waste,
- visiting the Nelson Reuse and Recycling centre, Transfer station and Landfill,
- hosting a zero-waste event,
- upcycling waste items, or
- something else you have in mind...

WES CAN HELP!

Contact Sarah Langi to book a session this term or plan for next year

sarahlangi@nec.org.nz Ph: 545 9176 ext 1

Energy in Schools has more funding

Thanks to funding from Canterbury Community Trust, the Energy in Schools programme is now available to all interested schools in Nelson and Tasman. Since it began in 2011, Energy in Schools, working with Enviroschools, has worked with several Nelson schools to reduce their energy consumption, improve energy efficiency, and learn about energy. Programme delivery is free and includes curriculum support, measuring and monitoring energy usage, and behaviour change.

Our technical advisor, Aaryn Barlow, has been offering free energy audits to schools in Nelson and Tasman; 38 schools in Nelson and Tasman have now received a free energy assessment.

The programme is available to all schools in Tasman and Nelson on a first-come first-served basis. The programme works well together with Enviroschools and Lindsey Fish, Nelson Enviroschools facilitator, has been co-delivering the programme in Nelson enviroschools.

Meet the Energy in Schools team

Sarah Langi,
Programme Coordinator
Email: sarahlangi@nec.org.nz



Aaryn Barlow,
Technical Officer
Email: aarynbarlow@nec.org.nz



Lindsey Fish,
Nelson City Council's
Enviroschools Facilitator
Email: lindseyfish@nec.org.nz



The Oil Game: a creative workshop for exploring solutions to the challenges of climate change, fossil fuels and more...

To launch the Energy in Schools programme, we have found that playing the Oil Game* has enabled children to quickly grasp the concepts of climate change, peak oil, fossil fuels vs renewable energy, and sustainable lifestyles. The workshop is fast-paced and exciting for students and adults alike and ends on a very positive note, with children enthusiastic and engaged in designing the future they want, and thinking of what they can change today in order to arrive at their ideal, sustainable future.

We have used the oil game mainly as a starting point for children to investigate renewable energy, but it has also proved helpful in understanding why plastic is a problem, leading to exploring how plastic is made, and the problems of plastic in the ocean.

We would, therefore, like to invite teachers to a workshop at Nelson Environment Centre so they can learn to play the Oil game with their students. The workshop is suitable for teachers of yr 5-13 students. The workshop will be held at Nelson Environment Centre at 3.30-5pm on 13 Nov.

To register, contact Sarah Langi sarahlangi@nec.org.nz ; Ph: 545 9176 ext 1 or Lindsey Fish lindseyfish@xtra.co.nz; Ph: 03 544 5302 or mob: 021 146 0247.



LEARNZ Field trips for term 4

Takahē: building on 60 years of conservation
22-24 October [More](#) | [Enrol](#) | [Log In Watch the intro video](#) on Vimeo.



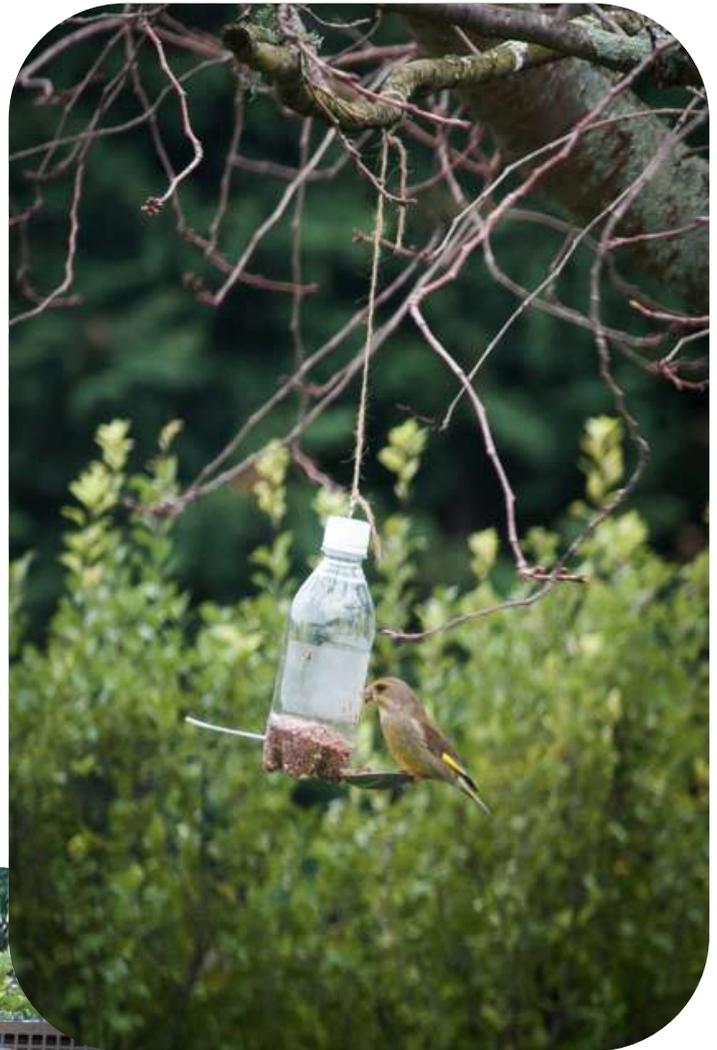
Stewart Island | Rakiura Great Walk: putting people in touch with kiwi 5-7 November [More](#) | [Enrol](#) | [Log In Watch the intro video](#) on Vimeo.



Crafty Critters Celebrate Nature

With Term 3 kicking off in winter and ending in Spring, it was the perfect term for the children in the Crafty Critter classes to focus on nature. Below are a few of Term 3's tried and true activities that will blow you away...

Birdfeeders – Made from small empty plastic disposable bottles, these bottles had parallel slits cut just above the base in order for the handle of a spoon to slide through. With the bird perch in place, a hole directly above the spoon allowed the bird food that filled the bottle to spill out. An eye-screw then inserted into the lid allowed our birdfeeders to hang from a tree. What once was rubbish turned into revolving restaurants for feathered friends.



Spring Equinox Entertainment – In time for the Spring winds, the Crafty Critters transformed standard supermarket bags into kites simply by tying string to the handles and stapling on bread bag streamers. More durable plastic bags were cut into triangles, sewn along the top and threaded on to clothesline cord to create bunting. While a plastic ring (the middle of a plastic disposable bottle) was used to attach bread bag streamers creating a windsock.

To find out more about what Crafty Critters have been up to, check out the Crafty Critters website www.craftycritters.co.nz. Crafty Critters offers classes, educational sessions and craft parties based around upcycling and sustainability. Call Philippa on 544 1973 to find out more.



NZAEE (NZ Association of Environmental Educators) conference, Christchurch –
15–17 January 2014 <http://www.nzaeeconference.co.nz/>

The **New Zealand Association for Environmental Education** looks forward to welcoming you to Christchurch for the biennial NZAEE conference.

While the conference theme reflects the seismic shift Cantabrians have experienced, it is really about how we, as educators for a sustainable future, shake up or re-energise ourselves! At this conference we want people to share ideas, experiences and processes that shake us up, leading to shifts in thinking and behaviour.

The draft programme is available at www.nzaeeconference.co.nz/ and the registration process is now open.



<http://www.kiwisforkiwi.org/save-kiwi-week/schools/>

<http://www.asknature.org/article/view/nuggets>

AskNature Nuggets, many tasty morsels (each roughly a minute) of biomimicry strategy. Nature is amazing!

Brand new from Annie Leonard: The Story of Solutions
<http://www.yesmagazine.org/people-power/from-more-to-better>

The final film in the “Story of Stuff” series asks: “What if the goal of our economy wasn’t more, but better—better health, better jobs, and a better chance to survive on the planet?”

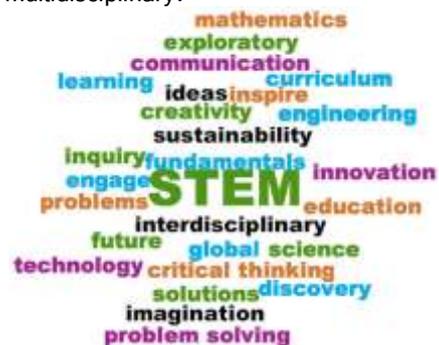
<http://kakarikigames.co.nz/cloak-protection/>



Facing the Future Series

<http://www.facingthefuture.org/>

A brilliant series for years 6–10 that gets students really thinking about building a sustainable future. They have curriculum units for teachers on waste, renewable energy, global issues and more. They are also developing an exciting middle school guide that is multidisciplinary:

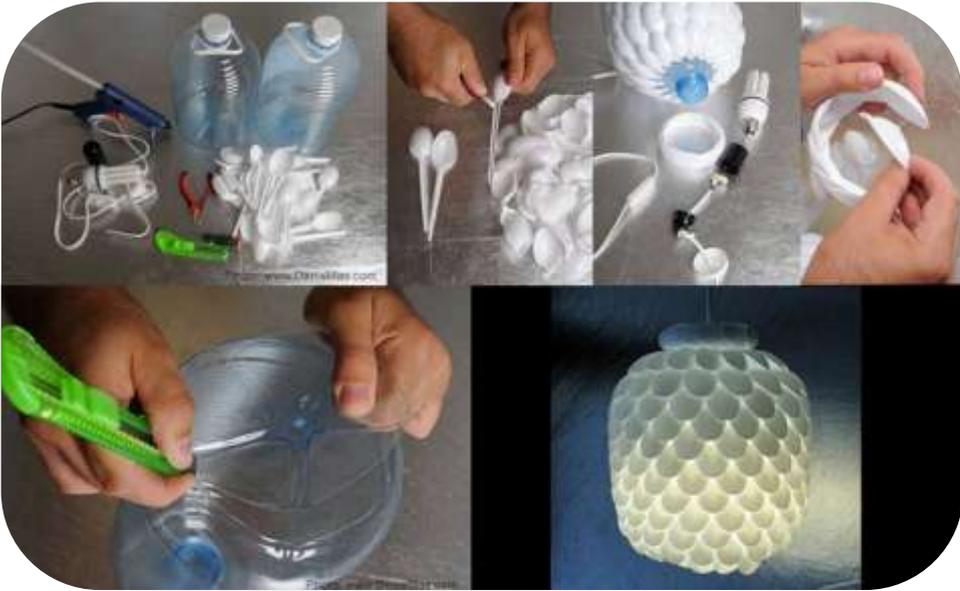


EfS notes from around the Web – September 2013 <http://padlet.com/wall/ue1zgj6wzj>

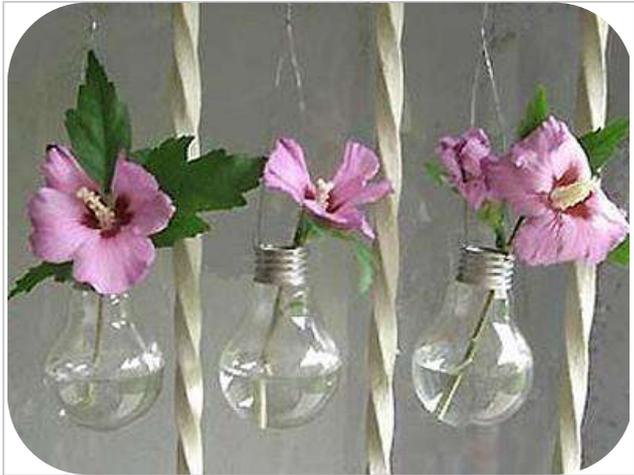
Simon Williams from Wanaka Wastebusters has created an interesting website full of good ideas for EfS. Simon says: “These are just some of the things I’ve found useful from the Internet this month in terms of education for sustainability..... If you have something you would like to include on next month’s wall, please email me ----> simon@wanakawastebusters.co.nz

To see each entire story, click on each panel and then click on the purple box “Source” at the bottom right hand corner of the screen.

Inspirational Upcycle ideas



All found on Facebook



FUNDING OPPORTUNITIES

If you are looking for funding for projects in your school, these websites have information and funding you can apply for. Information may change, particularly application due dates. It is best to contact funders for accurate information before you apply and to ensure your project meets their criteria. You can also check out this website for further information on funding www.fis.org.nz.

If you know of any other good funding sources please let us know and we will add to the list.

Applications with closing dates (listed in the month that they close so check out ones several months ahead):

January

[Air New Zealand Environment Trust](#)

February

[Canterbury Community Trust – Sector – Young People \(ECE\)](#)

[Habitat Protection Fund \(WWF\)](#)

March

[NZ Glass Environmental Fund \(O-I NZ\)](#)

[Fonterra Grass Roots Fund](#)

April

[Unisys Kidz Connect Grant](#)

[Biodiversity Funds \(DOC\)](#)

[Bayerboost Primary School Science Fund](#)

May

[Lottery- Environment & Heritage](#)

June

[James Sharon Watson Conservation Trust \(Forest & Bird\)](#)

July

August

[Canterbury Community Trust –Sector - Education](#)

[Treemendous School Makeovers](#)

[Fonterra Grass Roots Fund](#)

September

[Environmental Education Action Fund \(WWF\)](#)

[Canterbury Community Trust - Sector - Environment](#)

October

[Transpower Neighbourhood Engineers Awards](#)

[Bayerboost Primary School Science Fund](#)

November

[Fonterra Grass Roots Fund](#)

[Bayerboost Primary School Science Fund](#)

[Environmental Education Action Fund \(WWF\)](#)

December

[Canterbury Community Trust – Sector - Environmental](#)

Applications accepted at any time or several times a year:

[Honda Tree Fund](#)

[Conservation Innovation Fund](#)

[Kids restore NZ](#)

[NZ Community Trust](#)

[Lion Foundation](#)

[Mainland Foundation](#)

[Pelorus Trust](#)

[Weedbusters Small Scale Initiative Fund](#)

[Project Crimson Trust](#)

[DonateNZ](#)

[Mazda Foundation](#)

*“Big projects
often start with
small ideas”*

Learning from Nature - “Seeing” Function

If we are to learn how to see what works in Nature, in order to try and emulate this in the development of our own technologies, we need to be able to see how Nature functions. Functionality is the essence which biomimics seek to emulate from the natural world, for example, how the structure of gecko feet allow it to climb walls without using glue, or how termite mounds regulate temperature without external energy. Seeing function is not how students are typically taught to observe Nature, however. In this activity, students learn to “see” function in natural objects, ironically by encountering, describing, and considering natural objects while blindfolded. This activity is a fundamental introductory exercise that can be used with almost any age group.



BACKGROUND INFORMATION-

Biomimicry is an approach to technological innovation that draws its ideas from Nature to solve challenges in human technology and design. Energy efficient buildings inspired by the passive cooling in termite mounds and non-toxic adhesives inspired by geckos are examples of biomimicry. Seeing function in the natural world is a fundamental shift which enables biomimetic innovation to occur, because it allows students to begin to learn from Nature, rather than about Nature. For example, rather than only learn what the scientific name of a certain conifer species is, or in what climate and soil conditions it grows, a student would be encouraged to observe details about the trees form (e.g., the spiral of the bracts on the trees cones), and to inquire why this form exists, i.e., to question how the trees’ form enables it to have certain functional capacities (e.g., more opportunities for pollen deposition).

Biomimicry is learning from, and then adapting Nature’s best ideas to solving human technological challenges, in order to create a healthier, more sustainable planet.

GOALS

- Students will begin to understand the difference between learning about nature and learning from nature.
- Students will learn what biological function is, and why it is so important to discern.
- Students will learn how to explore an organisms’ form and function with entirely fresh “eyes”.

OBJECTIVES

- Students recognize that organisms’ are the way they are (in terms of anatomy, physiology, behaviour, etc.) to achieve many functions.
- Students learn how to explore an organisms form and function in an entirely new way, and to suspend what they “know” about the organism in order to see it with fresh eyes.

VOCABULARY BOX-

Adjective: An adjective describes a noun. For example, “salty” to describe the ocean.
Function: In biology, functions describe what a characteristic or process does or how it performs, within the context of natural selection and the imperative to survive and reproduce. As such, discussions of function seek to explain why an object or process occurs in an organism or system upon which natural selection has acted, and is closely related to the term ‘adaptation’ which is a functional characteristic of an organism. More generally, function refers to the purpose or operational result of any mechanism, so that we can speak of parallel functions that exist in both the natural and human-built worlds, for example, adhesion in geckos and in human-made products like medical bandages.

Class Activity

Materials

- Blindfolds for half the group
- a set of natural objects or access to outdoors.
- Your version of the worksheet or pen and paper for each pair of students

Biomimicry is learning from and then adapting nature's best ideas to solve human challenges, in order to create a healthier more sustainable planet.

PROCEDURE Duration – 10 – 45 minutes depending on age

1. Have the students form pairs, and give each pair one blindfold, and one worksheet (if using). Explain that the blindfolded person will explore a natural object with all of his/her senses except sight — feel the object, smell it, etc. While exploring the natural object, the blindfolded person should give adjectives about the object (e.g., “it’s very soft at the tips”, etc).
2. Give each pair a natural object, or, have them go outside where they can encounter natural objects.
3. Have the unblindfolded student hand the natural object to his/her partner, or, if outside, lead his/her partner to a natural object. Of course, instruct seeing partners to keep blindfolded partners safe at all times.
4. Have the blindfolded student use all of their senses (other than sight) to explore the object, and provide adjectives about what they are sensing. If using worksheets, have the unblindfolded student write these adjectives down. Do this with several natural objects.
5. If using worksheets, read the adjectives one-by-one back to the blindfolded student, and ask them to speculate on the function of the attribute. You can experiment with doing this with the blindfold still on or not.
6. Switch the blindfold and repeat, using new natural objects.
7. As an option, you can add a third column to the worksheet called “Application,” and have the blindfolded student return to the first row and brainstorm how each identified attribute and function might be applied to solving a human technological challenge.

Natural Object	Adjectives	Functions	Applications
cone	prickly	protection	Protective handbags to stop pickpockets

EXTENSION

Link to other activities on “seeing” function at www.biomimicryinstitute.org. Add a column on the work-sheets, “Application”. Have students brainstorm what application the functional adaptations might have for human technologies.

For more information have a look at <http://www.biomimicryinstitute.org/home-page-content/home-page-content/education.html>