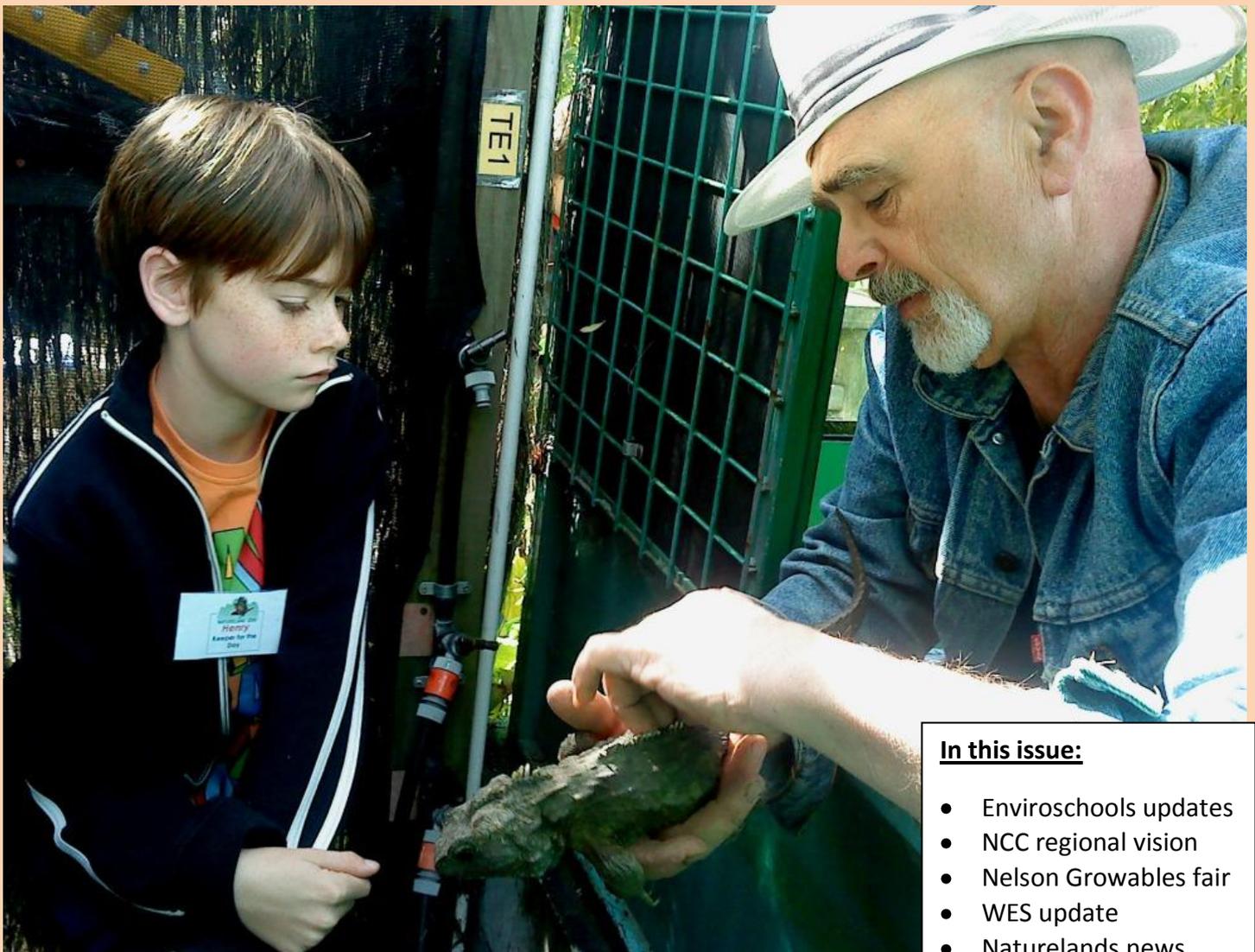


Eco Buzz

EcoBuzz edition 44

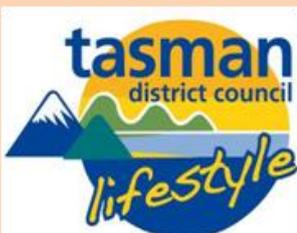
Term 4 2011



Bernard Redshaw (tuatara expert) and Henry Bowden (student who was a Keeper Kid for holiday programme) at Natureland.

In this issue:

- EnviroSchools updates
- NCC regional vision
- Nelson Growables fair
- WES update
- Naturelands news
- ECE in the forests!
- How to grow tomatoes in old newspaper bundles.



EcoBuzz is created with the help of many contributors – thank you to you all! Feel free to share this with others too – please.



Kia ora tatou –

Its term four and the weather is again lovely most of the time. Although it is a very short term it's also a great chance to find ways to have every child growing plants. This is a wonderful way to empower students making positive differences to their own close world, their health and to help the planet too. The chance to be interacting with nature, learning how plants grow, how to care for them and take responsibility are important learning. Learning patience, coping with delayed gratification and broadening their taste pallet can all be positive outcomes. Studies around life cycles, food webs, photosynthesis and reproduction abound. Crafting pots from recycled containers, gathering seeds or cuttings from the 'wild' can all be fun learning opportunities too. What is in the recycling bin that could be used to make plant labels? Sun flowers, potatoes, silver beet or kowhai trees – so many choices of what to grow! What is holding you back? Well-being is identified as a combination of mental, social and physical health. Assist your class in growing plants and help improve their well being.

Ngā mihi nui **Adie, Jo, Rob, Lindsey and Claire.**



Adie Leng



Rob Francis



Claire Webster



Lindsey Fish



Jo Martin

Please feel free to contact any of us;

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The Sustainability Journey ☺



“Where are we going?”

“I don’t know. I thought you knew.”

“No I don’t know. Maybe he knows”

“No. He definitely doesn’t know.”

Pause

“Maybe no one knows.”

Pause

“Oh well. I hope it’s nice when we get there.”

Our Quote for the term –

Sustainability is not a problem to be solved.

It is a future to be created.

Enviroschools

Tasman District and Nelson City Councils welcome Nelson Kindergarten Association as our Enviroschools Early Years partner. It is great that two Association teachers are now trained as facilitators in the Enviroschools kaupapa to provide experience and support.

Lyttleton action day!

What do 15 Enviroschools Regional Coordinators do when they get together for a hui in Lyttleton? They help out with some action projects designed by the students and staff of Lyttleton enviroschools!

Projects included spring garden maintenance at the Lyttleton Community Gardens, assisting children to complete a mural at Lyttleton Main School, topping up bark and sand pits at Lyttleton West School and sowing wildflowers as part of sculptor Andrew Drummond's Greening Spaces - schools project (www.greeningtherubble.org.nz), along with maintenance and planting at Kidsfirst Kindergarten Lyttleton and Busy C's Preschool.

We were inspired by the courage and resilience of the students and teachers that hosted us and we hope that just knowing others from around NZ care and haven't forgotten helped to boost spirits. Many thanks to Andrea Taylor and the Canterbury Enviroschools team for making it all happen 😊.



The Lyttleton Main school mural.

The Lyttleton greening spaces project – in action



Tasman Enviroschools

- Lake Rotoiti School, Waverley Street Kindergarten, Richmond First Years and Harakeke Preschool are our new Tasman enviroschools. 😊 **Welcome** and we hope you enjoy your sustainability journey with the support of your facilitator and fellow enviroschools. We look forward to seeing your vision maps.
- The Reflection for Progress workshop held at Greenwood Kindergarten in Motueka in September allowed participants to plan the next steps on their enviroschools journey and to check out the wonderful variety of integrated sustainability learning and action at Greenwood.

Nelson Enviroschools - Welcome to Hampden Street, Tahunanui and Victory Schools

Enviroschools

We welcome back Hampden Street and Tahunanui Schools who are both reawakening their connection to the Programme. We are also thrilled to welcome Victory School who have just come on board.

- Hampden Street School has established an Envirogroup. They decided to launch straight into a project in association with the Nelson Environment Centre. They are organising a bottle drive at the school to help make a recycled plastic bottle green house at the Centre.
- Tahunanui School have established an Envirogroup who meet weekly and have already made great strides in waste reduction at the school. They are currently exploring the Programme before they write their environmental vision statement.
- Victory School plan to establish their Envirogroup before the end of Term 4 and be ready for action in 2012.

What's happening this term?

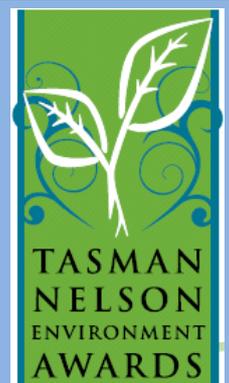
- **Regional Enviro-Discovery Bus Tour** - Wednesday 30 November. If you would like to get inspired for next year's enviroschools journey, contact Claire, Jo or Adie to register and obtain details.
- **2011 Scrapbook** is due out beginning of December and features Greenwood Kindergarten, Salisbury, Central Takaka and Motupipi Schools.
- **Remember Reflection Process:** Please arrange with your facilitator for a reflection session of your enviroschools' journey to plan for next steps if you have missed out on the recent workshops. It is fun and does really help to deepen your school's sustainability practices.
- *****Enviroschools Ten Year Anniversary***** On 5 December it will have been ten years since Enviroschools, as a facilitated Programme, went national and that is worth celebrating. The Enviroschools Foundation, overseeing the Programme, has asked each region to contribute a record of its own journey and we need your help to create our *Enviroschools Nelson/Tasman Awa*. If you or your school has anything you would like to contribute to our regional journey please contact Jo, Claire or Adie.
- **Congratulations to Anthea Kershaw, Nelson Region Gardener of the Year**– inspirational environmental teacher at Greenwood and Nelson South Kindergarten. Go to www.nzgardner.co.nz to vote for her to become the national winner! Votes close 30 November.



Tahunanui School envirogroup during one of their weekly meetings

Environmental Awards

Congratulations to all of the nominated schools and their efforts to make our world more sustainable: Golden Kids Early Learning Centre, Mapua School Environmental Group – Tane's Ark, Enner Glynn Playcentre, Broadgreen Intermediate School, Waimea College Year 10 GATE students, Parklands School, Clifton Terrace School – Stan, Waimea Intermediate School, Greenwood Kindergarten and Nelson District Kindergarten Association.



Framing our future - NCC regional vision – Have your say!

Check out our vision for the future of Nelson on the Council website and decide if it sounds like the kind of place you, your friends and your family would want to live in 50 years time!

The vision has been drafted based on the input of hundreds of Nelsonians through a range of community, school, business and Mayoral Taskforce workshops. It will be used to develop Nelson City Council's Sustainability Strategy – the blueprint for guiding our community towards a more sustainable future

The full vision is available on the Council website, www.nelsoncitycouncil.co.nz/framing-our-future-the-vision/ or hard copies are available at the Council office and libraries. This round of feedback has closed but there will be further opportunities for feedback, including a formal consultation process when the full draft Sustainability Strategy is released next year. So have a read and then have your say when the strategy is released.

Here are some particular questions you might want to think about:

- Does this vision of Nelson create a place that you and your family would choose to live in?
- Does this vision successfully unite people; the economy; the environment and culture in a common future?
- What do you like best in this vision?
- What do you like the least in this vision?
- Are there any broad themes that are missing?

Please call our Sustainability Adviser on 03 546 0339 if you need more information.



The Growables Fair - returns to inspire us at Founders Heritage Park **– Sunday 13 November 10-5pm.**

Congratulations to Salisbury School, Nelson Intermediate, Clifton Terrace School, Lower Moutere School and Tapawera playcentre who have all committed to a free stall at the fair (a great fundraising opportunity!). So come along to the fair and support them. Also, check out the chooks (always popular), bees, livestock and kids trail (completed entries go in the draw for a kids gardening package) 😊. You can grab a garden bargain and 'ask the expert' from Waimea Nurseries all your burning gardening questions. In the week leading up to the fair there are a series of garden tours – including a cycle tour of Nelson's Open Orchards and tours of Nelmac Nursery, Miyazu Gardens and Queen's Gardens.

For more information check out the website www.nelsongrowables.co.nz

WASTE EDUCATION SERVICES (WES)



Mary works with Nelson schools –
03 545 9176 or marycurnow@nec.org.nz
Sarah works with Nelson & Tasman schools (except Golden Bay) –
03 545 9176 or sarahlangi@nec.org.nz
Claire works with Golden Bay schools –
03 525 0020 or
claire.webster@tasman.govt.nz

The WES Schools Team – (from left) Mary Curnow, Sarah Langi, Claire Webster

Contact us to find out how WES can support you with reducing your waste, saving money and helping your local environment or check out www.wes.org.nz for new resources and ideas!

WES wins national award at the 2011 Environmental Packaging Awards

The WES Schools Team was thrilled to win the Fonterra Schools Educational Programme Award, a national award from the Packaging Council of New Zealand in August 2011 for the implementation of the WES Schools Programme by Broadgreen Intermediate School, Nelson.

The Fonterra Schools Educational Programme category is for schools' educational programmes that encourage the concepts of 'reduce, reuse and recycle'. WES nominated Broadgreen Intermediate School for the impressive results it has achieved since embarking on the programme.

Craig Maybee, a teacher at Broadgreen Intermediate, attended the ceremony in Auckland to pick up the award and a cheque for \$1000, which he said would go towards purchasing more recycling and composting bins at the school. He was thrilled that the school's achievements had been recognized nationally and that he got the chance to collect the award in person, 'Most teachers don't get the chance to do this kind of thing, it was a real honour'.



Photo: Craig Maybee (left) from Broadgreen Intermediate receiving the award.

The school has been part of the WES programme since its inception and working towards zero waste has proved very popular with the students. 'The beauty of this programme is that it is driven by the students. A couple of children in each class take the lead and get the rest of the team motivated which is the way we wanted it. It is empowering for them and it delivers learning on leadership as well as those important environmental messages', said Craig.

Paul Curtis, Packaging Council of New Zealand Executive Director said, 'The WES programme is responsive to each school's needs and motivates them to achieve zerowaste. It's exciting to see our future generation learning about the opportunities of minimising waste at school and in their wider community'.

The Environmental Packaging Awards is a bi-annual event that celebrates companies and individuals who champion issues and packaging product stewardship.

Farewell and thanks to Tasman schools from Sarah Langi

WES will no longer be working with schools in Tasman in 2012, as Adie Leng, Environmental Educator Coordinator at TDC will be supporting schools in their waste minimisation journey. Claire Webster will continue to support Golden Bay schools in her environmental education role with the council.



I have thoroughly enjoyed working with you over the six years of the WES programme and I am proud of your amazing journey in reducing waste and educating your children over these years. Now all schools are recycling, at least paper, and a huge percentage now compost or have worm farms and grow food. We have two zero waste schools in Tasman, and have won the NZ Packaging Council award for our WES schools programme in waste minimisation.

I sincerely thank you all so much for welcoming us from the WES team into your school and letting us pile up all your smelly rubbish and mess up your floors with muddy worm poos!

Of course our WES website and resources are available to all: www.wes.org.nz and you are all welcome to visit us at Nelson Environment Centre (NEC). We will continue to offer school workshops at NEC in composting/wormfarm/waste reduction, etc. for a small fee to cover costs for Tasman schools. Nelson City Council will continue to fund workshops for Nelson schools under the WES programme.

I wish you every success with reducing your waste in the future. Sarah Langi



Renewable Energy and Zerowaste are our future!

Nelson Energy in Schools Programme

Nelson Environment Centre (NEC) has begun a new programme to support schools to reduce their energy consumption and learn why this is so important for our future. Nayland College and Nelson Girls College have put their hands up to be the two pilot schools for this exciting new programme.

Nayland's NEST group started the ball rolling when they lobbied the Ministry of Education to give schools an incentive to reduce energy costs. Now the Ministry is capping school energy budgets at 2009 levels and will allow schools to keep any savings they make to spend on other operational practices.

The Environment Centre as recently received funding from the Canterbury Community Trust to work with the two pilot schools on a four-part programme:

1. Conduct an energy assessment and report.
2. Work with students and teachers to develop behaviour change tools for the whole school.
3. Work with teachers and students to develop resources on energy that support the existing curriculum.
4. Provide presentations, workshops and displays at NEC for school visits.

If successful, NEC will apply for further funding to roll out the programme to more local schools.

The Nelson Enviroschools team is working alongside the NEC team on the project. David Francis, Sustainable Business Advisor with Nelson Regional EDA, has conducted the energy audits with the students and provided a report for each school outlining the possible savings that can be made, together with suggestions on where changes in both behaviour and technology can reduce power consumption.

For more info on this programme contact Sarah Langi, Energy in Schools Coordinator on 03 545 9176 ext 1 or sarahlangi@nec.org.nz

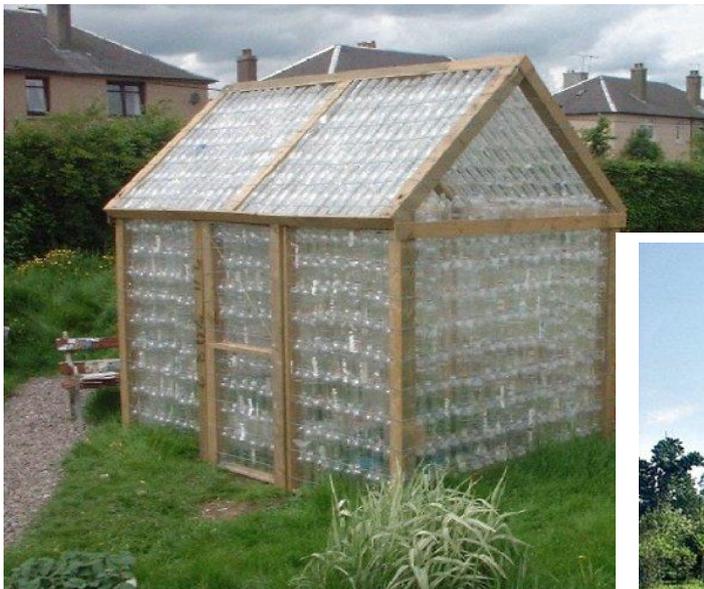
HELP - NEC needs your plastic bottles!

In the last issue of Ecobuzz we mentioned that WES needed your help to collect clear or coloured 2L or 1.5L plastic bottles to build a plastic bottle greenhouse at the Nelson Environment Centre (check out the photos below!). Thanks to all those who have collected bottles for us already - but we need more! We need around 1500 bottles to make this happen and although we have some, we desperately need more. Can you help by collecting bottles for us?

The bottles we need are 2L or 1.5L and should look something like these:



Unfortunately we can't take opaque bottles (like milk bottles) or non-transparent bottles (like bleach bottles) as these don't let enough light through them to let the plants grow.



We're certainly not encouraging anyone to drink more fizzy drinks or buy bottled water but if you have these at home and are currently putting them out with the recycling, why not donate them to us instead? We don't need the lids so if you haven't got them, no problem.

If you'd like to be involved in this project, we'd love to hear from you - contact Mary Curnow or Sarah Langi, WES Schools facilitators at the Nelson Environment Centre on 03 545 9176 or info@wes.org.nz for more info.

Natureland Zoo – where learning lives and breathes

What a busy time we have been having at the zoo with so many schools visiting! We have had an **Art and Painting** session with primary schools where students have been mentored by local painters in their drawing of native NZ birds. We have also studied:

Food Webs; Animals are my Passion; How Animals Keep Warm; Going, Going, Gone; Animal Adaptation; Year 12 Conservation; Group Sharing and Support; Tuatara Conservation; Birds; What Animals Eat; Animal handling (for special needs students); What is needed for animals and humans to survive?



Judy Campbell from the Nelson Art Group assists Liam Ingerson in his painting of native birds.



Zookeeper and ngati koata kaitiaki Pene Geiger with Kakariki the tuatara and Tahunanui students Jacob, Devon, Zane, and Jesse – 2nd placegetters in the Tuatara Groundhog Day competition. These students were close in their estimation of when the tuatara would emerge from their winter hibernation.

Animal Update

The tuatara have awakened! Schools have been researching and estimating when they would emerge from their winter hibernation and **Nayland Primary** won a free trip to Nature School as well as winning student **Liam Iles** receiving free coffee and plunger* and other prizes. Tuatara are an iconic native species and are a fascinating study for students on conservation and taonga. Our dedicated enclosure and tuatara education programme is ideal for schools (*courtesy of The Tuatara Coffee Company).

Education Programmes

Our environmental/cross-curricula programmes are custom developed to meet the needs of every different class attending Nature School. You pick the topic and we will make it happen with amazing animals, expert teaching and fun activities! We **can visit your school** or **assist you on field trips**.

I would like to visit your staffroom for a **3 minute presentation** to your staff at either a staff meeting or morning tea or department meeting – especially for your planning of next year's units (I am an ex-teacher and schools' adviser). Please contact me on 5486166 or school@naturelandzoo.co.nz



Teacher Feedback - "Information presented in fun way, with puppets and "doing" activities to get ideas across." "Thanks – perfect for my class." "10 out of 10 – fantastic teaching." "Part of our inquiry unit on energy – Roger tailored the topic perfectly." "Wow! What a fun time we had at Natureland Zoo! The children (and adults!) were absolutely buzzing. Thank you for a great educational experience."

Nayland Primary students Ashleigh Cunningham, Ashleigh Cawkill, and Isabella Howarth complete an observation task on 'Threats to animals'.

Phoenix – a true survivor

The only animal to survive the devastating fire at Touch the Sea Aquarium is undergoing the “Rescue and Release” process in our hospital area. Her resilience and location in the aquarium and staying underwater all led to her survival. **Phoenix** will be cared for here until (hopefully) Touch the Sea rises from the ashes. Although a pest in some parts of the world, this red-eared slider turtle is a symbol of hope and re-birth.

Red-eared sliders are native to North America. How could we know that Phoenix is a female? She has short claws for digging (the males have fine delicate claws!) Phoenix will be looking forward to meeting the other red-eared sliders once her quarantine is over.

Reptiles are a fascinating study for students. What can YOU do for red-eared sliders? **MAKE SURE THAT YOU DON'T RELEASE THEM IN TO OUR WATERWAYS** as they can significantly affect the ecology of our streams.

Natureland Zoo is busy and actively doing conservation education work with schools.



Zookeeper Lynn Cameron with Phoenix the turtle

STOP PRESS: -- “Natureland Zoo and Ngati koata are pleased to offer special ‘Tuatara Tuesday*’ learning experiences this term and term 1 2012. Learn about tuatara through *purakau*, hands-on observation and experiential games/activities. Learn about classification (Living World strand), body parts, threats and get to do the famous ‘Tuatara Teddy Hunt’ - as well as experience all the other wonderful animals at Natureland Zoo. Special cheap prices available for Tuatara Tuesdays..but we can be flexible” – contact Roger.

Contact the LEOTC Zoo Educator for your education needs:

Roger Waddell - 5486166 or 021 1671 246

school@naturelandzoo.co.nz and www.naturelandzoo.co.nz

Some healthy lunch ideas to share with your students – get them to brainstorm some more!

Nutrition is particularly important for children. The meals they eat are a vital part of their growth and development. Some useful questions to ask about lunches are:

- Are the lunches meeting the nutritional needs of the children?
- Are the children eating the lunches packed for them?
- Do they offer a variety of choices in an individual lunch and over a week?
- Also are the meals economical?
- Is there minimal or no litter in the lunch?

Part one: It's A Wrap! There is more than one way to make a sandwich! Try some of these ideas to make an ordinary sandwich more fun.

- Try putting your favourite fillings inside a tortilla or pita bread for a different kind of sandwich and give your old sandwich a new look!
- Fill a tortilla and then slice it to make fun pinwheel rolls. This works well with sticky fillings such as peanut butter and cream cheese.
- How about switching bread for a hot dog or hamburger bun?
- Pancakes make fun bread! Fill them with anything you would put between bread slices for a breakfast-inspired take on a sandwich.
- Other bread products that add spice to lunches are dry unsweetened cereals, flavoured rice or corn cakes, muffins and bread sticks.

Babes in the Woods

<http://www.secretgardenoutdoor-nursery.co.uk/index.htm>

Our kids are miserable because they spend too much time indoors. But one nursery in the Fife forest in the UK has a radical solution. Does it work? There was a time when most children spent their idle days like this. Ollie and Woody are clambering up the inside of the tree they call their rocket. They bicker over who is going to get to ride in the cradle of the trunk. The scene is a timeless one. Rewind 20 years and it's possible that one might have found two small children playing in the same spot in the Fife forest. But it is also, perhaps, a rare one for our times: all the more so because of the weather. It is cold, wet, blustery. Ollie, dressed in waterproof overalls, moans that he doesn't like the rain and wants to go back to the house. It's a complaint that belongs to a long lost era when children were sent outside whether they liked it or not. These two-year-olds, of course, are not out in the woods alone. They are accompanied by their childminder, Cathy Bache, creator of The Secret Garden, an outdoor nursery, whose days revolve around mud, rain, hot lemon drinks and woodland wildlife. Bache believes that a daily dose of the elements is good for mental health. While the younger children spend only half-days outside, those over three years old are out for seven hours, rain or shine, blizzard or heatwave, and only permitted into the house to go to the bathroom. Mostly, she says, her 20 children do not complain about the cold. If their kit is appropriate, they don't seem to notice. If their hands chill, she warms them under her jumper. Bache doesn't check the weather forecast the day before. "We're going to be out in it regardless."

The two boys pause at the bottom of a path where the water floods down in a small stream. They scoop up water in large plastic cups and offer it to us to drink. Rainy days, Bache says, are far more interesting than dry, warm, sunny days. There is more to do. "We make dams, we make mud pies." Bache likes to take a back seat. It's as if she is there more to facilitate than instruct.

The children choose their own routes; invent their own games. In one area of the wood, she tells me, they are pirates, in another tigers. She suggests that we wander to the shelter where we can have a picnic snack. It will be dry in there. Ollie, who took against the rain before, now wants to stay out and informs us that he likes the wet. No demographic group, she believes, is more divorced from the elements than young children. "It's those born in the past 15 years who really have missed out on the outdoor experience, partly because of the PlayStation and television. But what are the experiences most people remember when they talk about their favourite childhood days? They're almost always outside."

Bache believes early experience with nature is formative. "I think with the kids I am caring for, even if they do end up as normal teenagers indoors with their PlayStations, there is a little seed planted. Later on, when they've got their own free will, hopefully they will develop that in their own way."

Bache treads a considered line between risk and safety. Her children learn to light fires and saw wood, though only under supervision. She recommends a book by Canadian Michael Ungar, 'Too Safe For Their Own Good'. In it Ungar describes how "in our mania to provide emotional lifejackets around our kids, helmets and seatbelts, an endless stream of evening programming, and no place to hang out but the tiled flooring of our local mall, we parents are accidentally creating a generation of youth who are not ready for life. Our children are too safe for their own good." Taken from an article by Vicky Allan for the Scottish Sunday Herald.

<http://www.secretgardenoutdoor-nursery.co.uk/index.htm>



Are you looking for a new way your class could make a difference in the world?
Well how about looking in Kopernik? <http://kopernik.info/>



Your class could raise some funds to buy some technology that a community in a developing country says it needs – things like this Q-drum, so children and women in a Kenyan village can move water from the village well to home but on their heads! Or this solar powered light for students in remote Peru to use to study by at home where there is no electricity. NZ Kids can make a positive difference all over the world!



Young People Declare Green Economy Crucial to Earth's Future

BANDUNG, Indonesia, on 1 October 2011 young people from 100 countries declared their commitment to fast track a future Green Economy to heal and support the planet. More than 1,200 delegates, ages 10-24, attended the Tunza International Children and Youth Conference on the Environment in Bandung, hosted by the United Nations Environment Programme.

The word Tunza means "to treat with care or affection" in Kiswahili.

"As children, we can plant trees, clean rivers and beaches, but we cannot stop industries from polluting our rivers, we cannot force them to adopt a green economy. We want policies and laws that will make industries sustainable," said Indonesian 14-year-old Adeline Tiffanie Suwana.



Delegates share a laugh at the Tunza International Children and Youth Conference on the Environment
(Photo courtesy UNEP)

The event was capped by the Bandung Declaration, released today, that finalizes the requests of children and youth to governments attending the Rio+20 conference in Brazil in June 2012. The Bandung Declaration states, "In the next 10 years, as the world's population passes seven billion, we need to provide jobs for more than one billion young people - employment that will both enable them to live productive and worthwhile lives and to contribute to the transition to a just Green Economy." Young people call the Green Economy "the only integrated framework that is truly sustainable ... placing human well-being, social equity and environmental protection on equal footing." Daniel Isfer Zardo, a 24-year-old from Curitiba, Brazil, said access to green jobs should be at the heart of the sustainability debate.

"We have to look at our communities, our society, our environment, and realize that we cannot reduce poverty or protect the environment without green job opportunities, especially for young people. This is something that policy makers must consider, if we want the Green Economy to take off," Zardo said.

UNEP Executive Director Achim Steiner, who attended this week's meetings and debates, said, "Throughout the past week, the voices of 1,200 young people have spoken with passion and eloquence here in Bandung. Their positive vision, extraordinary energy and creative solutions must be heard as they are representing half of the world's population, it is vital that their efforts and inputs are not overlooked."

"Not only do young people have ideals, solutions and energy but they are often free from some of the finger pointing, political gamesmanship and vested interests of the past that can hijack a fresh future," he said.

<http://www.unep.org/NEWSCENTRE/default.aspx?DocumentID=2653&ArticleID=8879>

Healthy Lunch ideas part 2: - Healthy Twists

- Lettuce and celery pair nicely with peanut butter. Add some raisins for ants on a log or ants in a blanket! Try pairing peanut butter with apple or banana slices. Try other fruits such as raisins, sliced grapes or sliced strawberries.
- A small cup with dressing will help encourage your child to eat their veggies. Everything is more fun with a little dip! Try zucchini sticks, broccoli "trees," sprouts, tomato slices and celery.
- A small container of vanilla or fruit flavoured yoghurt makes a great dip for fruits and crackers. Try other calcium sources like hummus, beans, corn tortillas, cheese, and tofu, or cottage cheese with fruit. Buy big pottles of yoghurt and put some in a small container for each lunch.
- Cooked starches like casseroles made from rice, pasta or couscous are great mixed with a variety of vegetables and meats or beans. Keep in mind that these foods need to be stored in an air-tight container to keep their freshness.
- Try 'the Mediterranean': a small container of hummus, some chopped carrot, celery, and red pepper strips, and a package of whole-wheat pita cut into triangles. Opa!

At the Fonterra Factory site in Takaka Watercress creek is slowly being rehabilitated by students from Golden Bay Schools. Working on the factory site has its challenges but its great to see the changes over time as this spring fed stream never floods to clean itself up.

Watercress creek in 2005 – past cow pugging days



Gathering data to see change over time. 2011



2009 children from several Golden Bay school continue Fonterra's planting start. A big lesson was Pukeho's pull out plants without protectors!



Already the true right bank is healthier and slowly we reclaim the stream from the watercress creating better habitat for wildlife.

Yay it's a mud fest!

Lots of cute mini factory workers.



Who lives here?



A collection of websites contributors suggest you might find useful.

- Some great short films made by children and young people, for children and young people on a range of environmental issues www.theoutlookforsomeday.net/
- Following on from last issue's snippet about Greenpeace's campaign to expose Mattel for using unsustainable packaging – the good news is that Mattel have now made a commitment not to use toy packaging from companies that are tearing down the rainforest : www.greenpeace.org/new-zealand/en/news/blog/success-barbie-and-mattel-drop-deforestation/blog/37205/
- Check out this link for some easy to watch short animations on a variety of environmental topics like global warming and its affect on climate change, peak oil, food, waste and transport issues www.anitasancha.co.uk/
- Encourage your school to become 'waste wise' – download for free the 'Towards a 'waste-wise' school' booklet produced by WES www.wes.org.nz/files/files/7708_Waste%20Wise%20proof3.pdf
- www.solarpromise.org.nz/ Students can make a promise to themselves, their family and their community and help NZ go solar.
- <http://climate.nasa.gov/kids/index.cfm> Climate Kids is "Nasa's Eyes on the Earth" – climate change teacher resources, games and questions/answers and more for kids.
- www.wiredchild.org/schools.html - protecting children from wireless technology – at school and at home. Some important and scary stuff here!
- www.whenuaiti.org.nz/index.html - Whenua Iti Outdoors is our very own local Outdoor Pursuits Centre – they are LEOTC providers and have a great programme designed to extend the Health and Physical Education curriculum.
- The boys will love this one - a Japanese motorbike that runs on human faeces – www.wtop.com/?nid=884&sid=2580180 a poop bike! This might get those young inventors thinking anew!

Check out

- **Free Marine PD session** - Monday 7 November, 4-5:30pm
The [Science Learning Hub](#) and the [New Zealand Marine Studies Centre](#) are running a joint PD session for year 4-9 teachers at Nayland College, using ICT/web-based resources
To book your place contact: The New Zealand Marine Studies Centre, 03 479 5826 marine-studies@otago.ac.nz
- **TOTSEE Top of the South Environmental Educators/Teachers network** Wednesday 23 November 3:30pm meeting at Salisbury School. Come and see why Salisbury School wins lots of environmental awards and celebrate the end of a full year by networking with other educators. Please RSVP to carolyn@Salisbury.school.nz for catering purposes.
- **Be an informed voter:** Election Manifesto on Education for Sustainability is on the WWF website: http://www.wwf.org.nz/media_centre/news/media_releases_climate/?7701
- **NZAAE Conference: Changing Course for a Sustainable World**
Register by 15 November for the amazing opportunity to network with fellow educators at the biennial NZAAE Conference 17-20 January 2012. See www.nzaeeconference.co.nz
- **Velvet the Travelling Tuna Tapestry:** The tuna tapestry will be heading south in 2012. Is she coming to your school? See this blog for more information <http://savetheheels.wordpress.com/2011/07/19/taniwha-eel-exhibition-begins/> and see photos from the first main exhibition at KiwiNorth in Whangarei when she was just under 60 meters long!
- **Reminder: Starship Mobile Phone Appeal**
To date, the appeal has raised more than \$1,300,000 for Starship. The mobile phones they receive in working order are refurbished and exported to places such as Hong Kong, China & Eastern Europe. Those beyond repair are disposed of through the correct environmental channels. Further information can be found at <http://www.starship.org.nz/phone>

Activity one: Nature mobiles



Kids can play the nature scientist and artist in this fun, creative activity. Take a nature walk outside to look for cool and interesting nature specimens, then arrange them all artfully into a graceful nature mobile. Art truly imitates life in this project!

What You Need:

Medium-sized branch with smaller branches coming off of it

Ribbons, strong string, yarn or flax strands

Collection of nature items (to be collected on a nature walk) or as homework.

Glue or tape

Paint or glitter glue (optional)

What You Do:

1. Take a nature hike to collect a few natural objects that strike students fancy: acorns, leaves, flower petals, pebbles, wildflowers, and bark are a few ideas. Make sure the items collected aren't too big or heavy to hang from a branch.
2. Tie strings and/or pretty ribbons onto the branch, placing them on the smaller branches shooting off from the main branch. Tie the other end of each string around one of the nature items he collected during the hike.
3. If he likes, encourage him to decorate the branch with paint or glitter glue.
4. Hang the mobile inside the house, or outside where the wind can catch it.
5. Talk about the natural items he picked. Why was he attracted to the objects he chose, and what interests him about them?

Note that flowers used in the mobile will fade quickly, so enjoy your nature mobile immediately and perhaps take a photograph of it before the flowers start to droop.

Not into mobiles? How about one of these then!



All of these activities help us and our students to look with different eyes at our surroundings.

Activity two – growing vegetables in containers

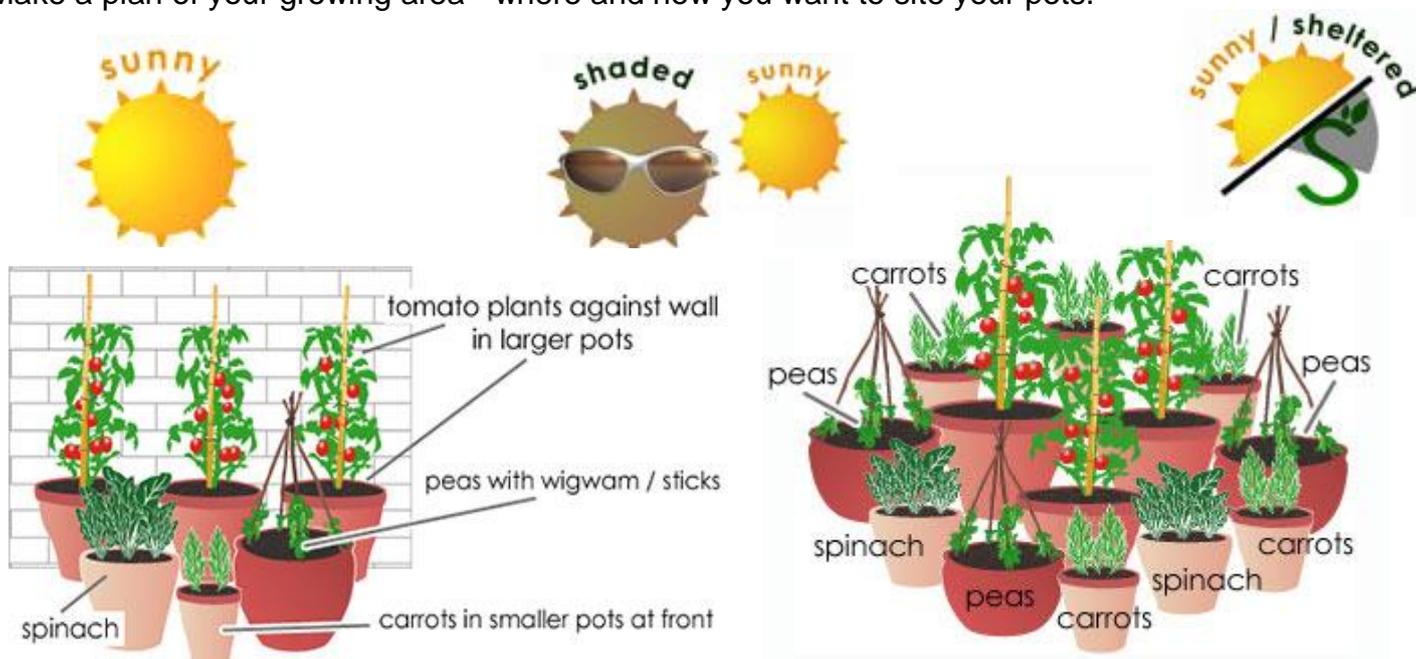
Have some fun and grow plants in a variety of containers. Some lucky students could then take them home for the holidays.



Recycling and reusing! Plants can be grown in any number of interesting containers so long as you can make drainage holes in the bottom and they are sturdy enough to hold compost. You will need to put stones or bits of polystyrene in the bottom of pots to help drainage. Plants can be grown in old metal pots such as buckets, watering cans or even a colander! Old shoes and boots (especially gum boots) can look very good and baths or the shell of a broken vacuum cleaner, dustbins, old wheelbarrows, plastic food tubs and even old toilets can be used. Children can get involved in decorating them too. Tied bundles of newspapers also make a suitable planting container

Whilst the use of old tyres as growing containers is a good recycling idea currently we advise against using tyres for vegetable growing due to toxins that may leach from the tyres.

Make a plan of your growing area - where and how you want to site your pots.



Use a good quality potting mix that has good water holding capacity.

Make sure taller plants are behind smaller ones.

Don't forget to stake tomatoes, peas and beans.

Remember Tomatoes will need a big solid container as they can grow to 1.5m tall.

Make sure you position containers so they get some sun each day without getting cooked. Find out if a plant likes a mix of sun and shade – like spinach and position accordingly.

They will need very regular watering.

Have fun and eat well!