

Edition # 39

Term 3, July 2010

What's inside this issue?

- Salisbury Girls & Ngatimoti Schools are now Green-gold Enviroschools!
- Ecofest lunchbox challenge
- Zero Waste grants info
- Build a Bumble Bee nest



Ngatimoti School goes very Green-Gold with Enviroschools! And all the students and staff followed the suggestion of a 5 year old and wore green & gold clothes for their main reflection day.





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



Tena Koutou,

We hope your third term is going well. Its wonderful to already feel Spring is in the air.

Please find lots of interesting articles and information within this issue of EcoBuzz – we are proud of our little e-magazine and hope you find it useful. Don't forget to share it with anyone who may be interested and please feel free to be involved too – either with articles or requests for changes or topics.

A huge CONGRATULATIONS must go to both Salisbury and Ngatimoti Schools – they have both just received their Green-Gold Enviroschools status. That makes them 2 out of only 20 in all of Aotearoa!

Regards Rob, Karen, Jo and Claire

<u>TDC</u> – Rob Francis – Environmental Education Officer, Ph 543 8484, Email: <u>rob.francis@tasman.govt.nz</u> Claire Webster – Environmental Educator, Ph 525 0020 (ext 450) Email:<u>claire.webster@tasman.govt.nz</u> <u>NCC</u> – Karen Lee - Sustainability Coordinator, Ph 546 0339, Email: <u>karen.lee@ncc.govt.nz</u> Jo Martin – Environmental Educator, Ph 545 8728, Email: jo.martin@ncc.govt.nz

Zero Waste Grants for Schools, Early Childhood Education Centres & Community Groups

Do you have a great idea that could reduce waste? Tasman District Council's Zero Waste Grants may be able to help you put it into practice.



Zero Waste Grants are available to help promote waste reduction ideas and projects and/or educate others about

the importance of reducing waste. Funding is available to help schools, early childhood education centres and community groups set up projects that reduce the amount of waste they produce such as the purchase of recycling bins, compost bins or worm farms and/or develop educational material on waste minimisation. Funding can not be used for buying plants or gardening equipment.

Contact Mary Curnow at Waste Education Services for further information about the Zero Waste Grant fund or an application form. The closing date for this round of applications is **Friday 6 August 2010.** Phone 03 545 9176 ext 3 Email <u>marycurnow@nec.org.nz</u>

Electronic waste and eDay update

Many schools were involved in the local eDay collections over the last two years and some have already contacted Nelson Environment Centre and Councils to ask about eDay this year. At the time of writing this there is no confirmation from the national eDay team (2020 Communications Trust) about plans for 2010. Environment Minister, Nick Smith, has indicated that central government funding will be available this year but we understand discussions are ongoing with the Ministry to determine the level of funding. There is also an outstanding issue with 220 tonnes of glass from CRT monitors that has still not been recycled from eDay 2009.

In the meantime a separate project is being investigated to recycle all electronic waste (not just computers) on an ongoing basis, with local collection/drop-off points through the country, and to ensure that more of the materials are recycled/refurbished/reused in New Zealand. The aim will be to start nationwide user-pays collection facilities by the middle of next year.

In the meantime, if any school has electronic waste that they need to dispose of then please contact Karen Driver at Nelson Environment Centre on 03 545 9176 ext 2 or <u>karendriver@nec.org.nz</u> for details of a possible interim solution.



Nelson Environment Centre for our sustainable future

Enviroschools

Kia ora koutou,

We are very proud to announce that we now have two Green Gold Enviroschools in our region! Many congratulations go to Ngatimoti School and Salisbury School on this success. As part of the Enviroschools programme we have an awards system which allows schools to celebrate and recognise their progress. Green Gold is the highest Enviroschools award and recognises that schools are successfully embedding sustainability. Ngatimoti School and Salisbury School now join a total of 20 Green Gold schools nationally.

Following on from the success of the numeracy workshops last term, we are pleased to let you know that we will be holding further workshops in term 3. The focus of these will be integrated project design using 'back-of-the-NZC' strands, action competence in our teaching, ideas for integrating literacy and sustainability education through Enviroschools. Please do let us know if there's anything you would like to see us focus on in term 4.

There's been a lot of interest in supporting students with action projects leading to energy saving, especially following Nayland College Envirogroups' success in changing the policy on how energy bills are paid within schools. To find out more ways to support your students in this type of learning and action, please come along to the primary cluster meetings where Roger will be presenting some activities and familiarising you with tools from the Precious Energy section of the Enviroschools kit.

As always, please do not hesitate to get in touch if you would like any support or if you are interested in finding out more about the Enviroschools programme.



The refection team at Salisbury all agrees!

Kate Cobb <u>– kate.cobb@hotmail.com</u> ph 5418293 Monique Patterson – <u>monique_patterson@xtra.co.nz</u> ph 5268130 Roger Waddell – <u>corru.gate@xtra.co.nz</u> ph 5402793 Claire Webster – <u>claire.webster@tasman.govt.nz</u> ph 525 0020

From Kate, Claire, Monique & Roger

UPCOMING DATES FOR TERM 3

11th August – **Primary Cluster meeting** with an energy focus, **Motueka** location 3.30-5.00

- 17th August **Scrapbook pages** due to Regional Coordinator (Please NB your signed Permission of Use form)
- 18th August Top of the South Environmental Educators (**TOTSEE**) meeting NCC Offices, 3.30-5.00. All welcome
- 20th August **Secondary workshop** exploring action competence and planning courses, 10.00-4.00 (tbc)
- 26th August **Primary Cluster** meeting with an energy focus, **Richmond/Nelson** location 3.30-5.00 27th August **Scrapbook cover competition** entries due to Head Office
- 9th September **Primary workshop**, Motueka/Golden Bay schools 1.00-4.00
- 15th September **Primary workshop**, Nelson/Richmond schools 1.00-4.00

*To find out more about these events, to register and/or confirm dates and venues please contact the Regional Coordinator. Paid teacher release may be available for the primary workshops.



Green Gold at Salisbury – A Facilitators perspective By Monique Patterson

The air of anticipation was apparent on Tuesday 23 June 2010 as the Enviroschools reflection team was lead through the school into the Wharenui, to be welcomed by a whole school assembly. Dan Hayes of Salisbury spoke the opening welcome in a combination of Māori and English which set the scene for Jan from Enviroschools National Team who responded in a similar manner. The Kapa Haka group, supported by the rest of the school performed, and sang in a heart felt and

passionate way, the Enviroschools team of only four sang, E tu kahikatea, bravely in response. The starting reflection team was formed, 7 students, 2 lead teachers and the Enviroschool team. The students lead a tour of the school. The purpose of the walk being to help the whole team feel connected and also connected to the school itself, to see some of the projects being talked about and to provide a basis for the following discussions of the day. The students proudly escorted the group around their school taking turns to explain how the paper recycling system works.....or how the Ecohut challenge led to an investigation into the history of the buildings at Salisbury.....or how the eco-sourced lowland forest won the Plant Conservation Award this year....or what each of the designs on the newly erected 7 metre pou meant.

What came through so strongly from the students was their ownership and understanding within the group of all of these projects, processes and the meaning or reasons behind them all. It was becoming clear that these sustainable principles and practises are part of what it means to be a student at Salisbury School. After a beautiful lunch, the reflection team changed into an adult group, which more of the staff from across the school joined. This group discussed the Green Gold paragraph until the group felt comfortable that the school identified with each of



the sentences. By this stage of the day there was little doubt as to the confidence of being at Green Gold level within the adult group. Lastly the students needed an opportunity to voice their opinion.

To bring the day to a close, the previous work done on the Guiding Principles was built upon, highlighting



the links between the schools journey and actions to the Enviroschools Guiding Principles. This was followed by the group breaking into smaller groups to discuss why they each thought Salisbury School was a Green Gold school. Thoughts were shared, the responses were all in unanimous support, the students never really had any doubt about this anyway.

Yee Hah we all agree!

This day provided both a recollection and a reflective process for the students and staff as they relived past experiences in their sharing and it was also an opportunity for the Enviroschool team to acknowledge the extent and depth of the journey that Salisbury School has undertaken. Salisbury School is the first secondary, first residential and first special needs school nationwide to receive a Green Gold award.

Congratulations Salisbury you are an inspiration to other schools in our region

Ngatimoti School goes Green Gold too!

Ngatimoti School reached Enviroschools Green Gold status too! While the reflection day for Salisbury was sunny and calm, the next morning dawned with a heavy grey sky – this then turned into a cold windy and very wet day. Even though the weather was challenging it couldn't dampen the spirit of the Ngatimoti school populace. Jan and Chris (from the Enviroschools National Team), Kate our Regional Coordinator and myself as the lucky guest – were met at the gate by the Envirogroup leaders who all had information to share. We quickly noticed a theme – everyone was dressed in green and gold – the whole school looked wonderful. Each class also had a short presentation – song, video, poetry etc. Then it was off to the community rooms with the students selected to be involved in the reflection process. We went on a very soggy tour of various projects – again the rain didn't stop enthusiastic conversations.

We then ate a delicious morning tea of muffins made by the junior class with some of the ingredients grown at the school.





Left - on the soggy tour of the school grounds. Above – happy students after the decision is reached.

Below – Staff, BOT member and student leaders all celebrate.

The Reflection team discussed some of the school environmental history, various projects and how sustainability/environmental education are threaded throughout the classroom work of the school, policy

and procedures and the whole school culture and community. Lunch was also locally grown and fabulous. One of the techniques used to draw out information Was to make a tree with each of the 5 limbs being a separate Guiding Principle. Leaves were then added to each limb showing different aspects of projects and school decisions.

After some further discussion the whole group -(including the Principal, BOT member, staff and the ever enthusiastic and knowledgeable student leaders and Enviroschools team) came to a unanimous decision the school had reached Green Gold Level.



By Claire Webster - Enviroschools Facilitator for Golden Bay

Congratulations Ngatimoti School!



EXPO 2010 - 21 & 22 AUGUST

So what's happening this year?

Prior to Ecofest -

There's the Eco Challenge – eating and drinking locally grown, baked, made or produced items for the month prior to Ecofest. See <u>www.ecofestnelsontasman.co.nz</u> for more information.

The Lunchbox Challenge for schools, previously distributed by Jo Martin at Nelson City Council. Contact her on jo.martin@ncc.govt.nz for more information.

At Ecofest –

Funky Fashion Shows – on both days at 12.30. Creations must be made from recycled materials. If you haven't already registered, please contact Jo Reilly now on Ecofest@xtra.co.nz. This is a great way to showcase your creative students. Junior and Senior categories for years 5-8 and years 9+.

The Science Roadshow special exhibition trailer – with around 30 interactive exhibits with wide age range appeal which will reflect the following themes:

- Ecology From identifying native birds from their song to basic food webs, identification of plants and dating of trees
- Earth resources and processes From minerals that make up your cell phone, to luminescent walls, augers, earthquake epicentres, insulation and density
- Health From milk-soft drink comparison, to a milking cow, types of milk and food additives

Eco travel for Youths – the story of a year travelling around New Zealand as a WWOOFer (Willing Workers on Organic Farms). Seminar on Saturday afternoon. This is a great way to see New Zealand and learn new skills.

How to Green Your School – be inspired by a school that's already done it! Tips, suggestions, what's worked, what hasn't. Seminar on Sunday afternoon.

Watch out for the Ecofest programme in Live Nelson and Newsline.

Displaying childrens' sustainability work at Ecofest -

We would like to invite schools to once again display some of your Environmentally/Sustainability focused projects/classwork undertaken in the last year. This year we ask you to make it fit on a 1 m wide and 1.5 m high poster/board – approximately – including the name of your school. You can attach things to it so it doesn't need to be flat as such but we need to be able to put it on a wall somewhere in the expo. If you have a larger free-standing item (like the fab bike-lawnmower last year) we could find room for this too.



An Invitation to schools -

The Nelson Growables Garden Fair will be held on Sunday, 14 November at Founders Heritage Park, Nelson. It is a garden fair for all things gardening related.

We would like to invite schools to consider Growables as an opportunity for fundraising by selling gardening related items, seedlings and other propagated plants.

If you're interested, please email Jo Reilly on <u>info@nelsongrowables.co.nz</u> for more information. We have the expertise available to teach your students how to propagate, and can help with potting mix etc.

This is a great opportunity to not only raise money for your school, but also for your students to gain additional gardening knowledge. Please contact us now so you can get growing.



Helping Kids Grow -<u>www.mccainveggiepatches.com</u>

Register until 20 August 2010. Collect points by sending in barcodes from McCAIN frozen vegetable and McCAIN Purely Potato packs. Redeem points for veggie patch equipment for your school - school's can order equipment once per calendar month from 14 June until 31 October 2010.

Open Orchard Programme for SCHOOLS – FREE TREES!!!

Open Orchards is funded by the Nelson Marlborough District Health Board and is an initiative to plant more fruit and nut trees on public land for all to enjoy! It provides **free** fruit and nut trees to groups wanting to plant them on public land (council reserves) or in schools. It works on a first come first served basis – as funds are limited! Also only trees able to be planted at the time of enquiry will be available but you can place an order with Elizabeth now so not to miss out. Nelson Environment Centre (NEC) has taken over managing the Open Orchard Programme and the contact is Elizabeth Hovell at NEC. If you are interested in finding out about the fruit trees available email Elizabeth at <u>info@nec.org.nz</u> or phone 545 9176 ext 0 and she can provide a list of the fruit trees available and the process involved. Also view the Nelson Marlborough Fruit Map on Google Maps to see what trees have already been planted where in Nelson/Tasman.



Kids Edible Gardens in Schools (KEGS) begins in Nelson

Kids Edible Gardens Nelson (KEGs for short) aims to support primary schools to teach students about edible gardening and how this relates to waste minimisation, healthy eating, physical activity and environmental awareness in general

Why edible gardening?

It is widely accepted that edible gardens are a great way to get kids interested in the natural world – how things interact, where our food comes from, where our waste goes... When kids are involved in growing their own food, they are more likely to take an interest in eating more healthily, plus they get the benefits of the physical activity.



Nelson city Schools were encouraged to apply, although due to limited funding, only eight could be selected. The following schools are involved in 2010:

Clifton Terrace School, St Joseph's School, Auckland Point School, Stoke School, Birchwood School, Nelson Christian Academy

Who is supporting the programme?

Nelson Environment Centre could not run the KEGs programme in Nelson without the valuable financial support of : **Prometheus Foundation, Nelson Marlborough District Health Board's Nutrition and Physical Activity Programme, Nelson City Council, NZCU South.** Thank you sponsors!



Broadgreen and Waimea Intermediate schools take a leap of faith to become the first Zero-waste schools in our region! By Sarah Langi & Mary Curnow from Waste Education Services, part of the Nelson Environment Centre

Last year's zero-waste challenge had a big impact on Broadgreen Intermediate School, and now they are well on track to be one of the first zero-waste schools in the region! A year down the line, Broadgreen caretaker Peter says the waste has reduced by at least 50%, which is a fantastic achievement. And even better, they've inspired Waimea Intermediate School to do the same.

I asked Craig Maybee, a teacher who has been instrumental in getting the zero-waste initiative, why the school took the zero-waste path. "We knew we could do better as a school", he said. "If we are serious about changing the way our actions affect our environment, we need our young people to take ownership of the problem at a young age. After all, they will be the ones cleaning up after we are gone!"

'How did you get started?"-"Luckily we have a very supportive Principal, who provided funding for the recycling bins and buckets we needed", he replied. "We also wanted the students to own the zero-waste concept for it to work to its full potential. We didn't want it to be a case of the teachers making them do it."



Joseph Brady, Yazmin Kwok-Knight, Cale Kemp and Campbell Rollo part of Broadgreen Zerowaste Monitors team

With everyone on board, they removed the rubbish bins from all the classrooms, the staffroom and offices and replaced them by containers labeled 'paper', 'cardboard', 'plastic' and 'food scraps'. A team of students volunteered to take responsibility for managing their classroom waste and educate their peers about how and why the school was going zero-waste.

I asked these enthusiastic students what made them volunteer. "We wanted to make the school a better place for everyone and stop everything going to landfill" say Campbell, Joseph, Cale and Yazmin, who have been involved in the challenge since the start.

"We've had great support from the teachers who help us at morning tea and lunchtimes by making sure people put things in the right bins or take their rubbish home."

"We collect the paper, cardboard and plastic from each room every week and put them in large recycling bins ready for collection. The food scraps are collected everyday so that they don't become smelly. These are picked up by a local farmer who feeds it to his pigs." They also have a bowl in every classroom where students put any unwanted food. Everyone can help themselves to the food and it's proved really useful when someone forgets their lunch!

So what's their aim for this year? "We want our school to have no rubbish at all!" say the monitors. Their enthusiasm is infectious and, when they were asked by a couple of inspirational teachers at Waimea Intermediate how they did it, they were very happy to show them. Now, Alan the Waimea caretaker and Graeme the groundsman are amazed and delighted.



The waste-buster group at Waimea Intermediate is a busy one!



Having an open and small-sized bin is a way of keeping non-recyclable rubbish at a real minimum.

They had been very worried when, at the start of the school year, it was announced that the school was planning to go zero-waste. They had thought it was impossible.

"When the rubbish bins were closed up, it was like taking a leap of faith" said Alan, "and the miracle is that it worked! I no longer have to go around the school emptying all the bins." The skip used to be emptied once per week but now it's only once per month. At \$80 a time for pick-up, that saves the school a huge \$240 a month." So how did they do it?

- A 'waste-buster' group was formed, comprising 2 students per class;
- Colour-coded and clearly labeled recycling bins were placed in each classroom, including a small, open bin for non-recyclable rubbish—the key one to be minimised—and a food scrap bin;
- The canteen only sells food wrapped in recyclable containers;
- The Moosie company was asked to provide a recycle bin for Moosie wrappers (which the company collects and recycles);
- The food scraps are collected for local chickens/ pigs;
- A PACK-IN PACK-OUT policy for non-recyclable lunch wrapping is in place—if the students bring in muesli bars, etc., they have to take the wrapper home again;
- Reward tickets are handed out for rubbish-free lunches and these tickets can be exchanged for rewards, such as trendy lunchboxes with compartments that allow food to be 'naked' (unwrapped), drink bottles, and other treats designed to motivate the students;

"How's it all going?" I asked the waste-buster group as they gathered for their weekly meeting. "Well", they admitted, "there are still lots of problems to sort out; the main problem is getting people on board. There are still a lot of students who can't be bothered to do the right thing and drop their rubbish on the ground when no one's looking – But we are working on it!"



Jessica Ladley, Olivia Pugh, Sally Hodgson and Phoebe King from Waimea Intermediate show off the classy classroom bins that are in every classroom.

Littering is an ongoing problem for both schools, but the students are coming up with some innovative ideas for dealing with it.

"We are planning a surprise litter audit---we'll collect all the litter in the grounds and see what it is and where it comes from. Then we'll ask everyone how to stop it happening. Then, a **celebration** – we want to reward students for their progress and make it fun. We might even make some posters to stick up beside the bins, and a song. We've got lots of ideas; we just need to DO IT!"

Well good luck to you all – you're doing an awesome job! And there's a whisper on the breeze that another school might have caught the zero-waste bug and be planning another leap of faith!

LEOTC at The Touch the Sea Aquarium. By Richard de Hamel

I've recently met several teachers who are new to the region and didn't know about my programmes and what I do, so I here is a bit of a run down – we could call it advertising!

The contract I work under is supplied by the Ministry of Education, so my programmes are curriculum linked and specifically for schools. Most of the core aquarium based programmes have been developed by the NZ Marine Studies Centre, University of Otago, and I have been able to adapt (improve!) them to suit this region.

So here is a quick run down on the programmes on offer, I can of course cover any other topic as required.

Fish, Fins and Fun Levels 1 - 4

This sounds ... fishy! Investigate what it would be like to live in the sea. Find out what makes a fish a fish. In the aquarium observe the diversity of local species and their adaptations. Bring the camera, we have a fishy dress up to explore the parts of a fish.

Creature Features Levels 1 - 3

There's mystery to be solved. Find out how scientists classify common marine animals into family groups. Have a go at doing it yourself. Is a crab related to a shrimp? What is an octopus related to? Which family does the mystery animal belong to? Useful as part of a larger rocky shore unit.



Supper in the Sea Levels 2 - 5

Who eats who in the ocean? Explore marine food webs and how local sea creatures to catch their food and avoid predators. Use feeding trails on animals in the aquarium to see who eats what. Explore issues of sustainability and human impact on the oceans. *Puppets are used to help younger students to explore the marine food web*

Sharks, Inside and Out Levels 3 - 5

Are sharks killers of the ocean or just misunderstood? Investigate the shark's design as we run experiments in the aquarium tanks to discover what has made them so successful. Get the 'inside story' as we dissect a small shark. Explore conservation issues that surround sharks.



Hangarau hi ika : Māori Fishing Technology Levels 2 - 5 Nau mai haere mai. Step back in time to look at how Maori survived in Tasman Bay. Explore the raw materials and how they were used for hundreds of years. Look out fish! We try some fishing methods in the aquarium tanks. Compare both traditional Māori and modern methods of catching fish. Were Māori a model for sustainability? Explore the

consequences of excessive harvesting on food chains.

Antarctica – life under the sea ice Levels 1 - 5

Brrrr! Get ready for a cool trip to Antarctica! Find out how life copes above and below the ice. How do the locals survive such a harsh environment? Learn about the marine food web and the important role of krill. Get to know early explorers of Antarctica and experience a wind machine. Explore conservation issues that surrounding Antarctica.

Pirates and the ocean treasures Levels 1 - 3

Ahoy there my hearties!! Peep inside the pirates treasure chest, find out about weapons, navigation, ship board life and marine curios. Shiver me timbers the treasure map is left behind and appears to be real! Embark on an adventure to Rabbit Island & find the 'mapless' pirate looking for his treasure. For a share in the treasure do a deal with the pirate, use the map and follow the clues!

Here Be Monsters – exploring the deep ocean Levels 2 - 4

Dive down into deep unknown. What will you find? Who will you met? And how do they survive? Investigate the challenges that face deep sea biologists as they try to unlock the secrets of the deep. Participate in a squid dissection to learn more about this deep sea creature. Check out the bizarre preserved deep sea specimens.

How Big Levels 2 - 5

An exciting new programme, still in production, but available from mid August. It explores the use of measurement and mathematics in scientific research. Can the size of a whale be calculated from a single vertebra? Or the size of a shark from one tooth? Meet some plankton? Try to assess wild populations like a real scientist? Students measure, extrapolate and interpret, their own data with life sized props and real examples.



Programmes based at the Aquarium cost \$4/student, all accompanying adults and teachers are free. In-school or beach-based programmes are free, but I am not funded for travel so a koha is appreciated.

beach-based programmes are free, but rann not funded for traver so a kona is appreciated.

I will be visiting most schools in the region early in term three, so look out for a bunch of new resources arriving soon.

My contact details are Richard de Hamel, ph 03 540 3755, 021 131 8334, or richard.dehamel@otago.ac.nz



http://www.skidlidkids.co.nz/

a website supported by TDC and NCC all about cycling – designed for children to enjoy.

Share the road

A "Share the Road" project was taken to two Tasman and two Nelson schools in June. The project aimed to highlight road safety issues around children walking and cycling and sharing the road with trucks.

The children were first shown a DVD on safety around trucks and they then had the opportunity sit behind the wheel of the truck. Dave from Star Trucks showed the students how difficult it can be for him when he is driving his truck to see anyone walking or cycling in the truck's blind spot. He also talked about the effect that wind blast can have on children cycling if they are overtaken by a truck.

The project was run in conjunction with the council, Grant Turner from the New Zealand Road Transport Association and David Semaine from Stuart Drummond Transport.

For any further information please contact:

Krista Hobday - Tasman District Council 03 543 8551 or krista.hobday@tasman.govt.nz

Nayland College students use old skis as product development resource

Nayland College students embarked on, what was to be, a voyage of discovery as they developed 'value added' products in our workshops. They worked with the readily available stock of second hand snow skis, thanks to the support of the Nelson Environment Centre. Two senior Technology workshop classes lead by teachers Damian Roughan and Natasha Cardwell worked with students as they addressed the issue of what can be done about all those, now 'out-of-date' and 'redundant' snow skis



from the NEC. The journey of discovery started and ended with attitude. An initial wave of negativity and "They're just rubbish" comments ended up becoming, "Wow I've made something cool" and "A teacher wanted to buy mine and she did for sixty bucks."

Slogans and posters with 'Redundant..... yeah right' and 'Innovation-Adaptation-Renovation' helped create a sense of purpose. The evidence of success was displayed in the school library and produced credits towards NCEA.

Damian Roughan - HOD Technology and Graphics





Grant, Ranzau School teacher Diana Peterson and students from Room 3.

International Year of Biodiversity

Over the next three months people throughout New Zealand can write messages about biodiversity and attach them to a giant kākāpō. Two giant birds, made out of steel and mesh, have been made by the Department of Conservation to help celebrate the International Year of Biodiversity 2010.

During the initiative, called Words on a Wing, people are being invited to write a message on a cardboard feather and attach it to one of the kākāpō.

To celebrate the International Year of Biodiversity, the Department of Conservation, with support from The Enviroschools Foundation, has launched an environmental action to give young people the opportunity to tell world leaders why biodiversity matters to them, what they want them to do about its loss, and As part of this initiative, we've put together an educational resource for teachers to use that includes instructions on how to create a 2D or 3D version of the Words on a Wing kakapo.



Words on a Wing'

http://www.doc.govt.nz/getting-involved/events-and-awards/international-year-of-biodiversity/words-on-awing/make-your-own-kakapo-kit/

There will also be a giant Kakapo at Ecofest this year that messages can be added too. Look for it in the schools area.



The 4th **The Outlook for Someday** sustainability film challenge for young people was launched in early July at <u>www.theoutlookforsomeday.net</u>

The basic challenge is the same as ever: make a sustainability-related film, any genre, filmed with any camera and any length up to 5 minutes.

Anyone up to age 24 can enter, either individually or in a team.

The closing date for entries is 17 September.

Last year for the first time there was a Standout Winner, *The Break Up*, by Charlee Collins of Kaitaia College. It is now a finalist in the Panda Awards at the international Wildscreen Festival, known as "*the green OSCARS* ®".

The 20 Winning Films will be celebrated at **The Outlook for Someday Awards** red-carpet ceremony towards the end of the year. That is when the Special Awards get announced. The Winning Films will be broadcast by TVNZ 6 on both Freeview (channel 6) and SKY Television (channel 16). And there will be a vote for Audience Favourite. You can watch the Winning Films from previous years at www.theoutlookforsomeday.net/winning-films

DVDs of each year's Winning Films are available at <u>www.connectedmedia.org/catalogue-tofs</u> **The Outlook for Someday** in 2010 is a partnership between Connected Media, TEAR Fund NZ, the New Zealand National Commission for UNESCO (Project Partners) and TVNZ 6 (Screen Partner). The Enviroschools Foundation and WWF New Zealand are Supporting Partners. The Department of Conservation is joining the project as a Funding Partner.



Tasman District and Nelson City Council's Environment Awards recognise those people in our community who have demonstrated the use of good environmental practice, environmental enhancement and environmental sustainability. Keep a look out for this years Environmental awards forms – due out

soon! Our schools always do so well in these.

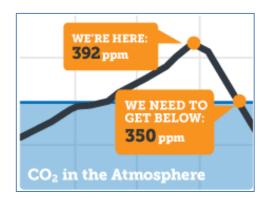
Psst - The ceremony will be November 24th so keep it free!



Scientists say that 350 parts per million CO2 in the atmosphere is the safe limit for humanity. 350 Aotearoa is planning (like last year) on reaching out to

schools and inviting them to take a climate-positive action

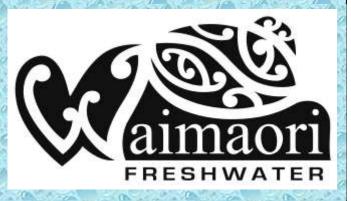
The Science of 350



as part of a coordinated global effort to reduce carbon emissions 10% by the end of 2010. You can read more about 350's global campaign at www.350.org

WAIMAORI ON WAIMARAMA FRESHWATER FOCUS ON THE BROOK

On Saturday the 3 July keen volunteers, council staff and associates got together with the community to plant and enhance the riparian margins of the Brook/ Waimarama stream at the Hockey Reserve for NCC's community planting event. Here was a fine example of kaitiakitanga in practice. People happily working together not for monetary reward, but for the sheer satisfaction of knowing they've contributed to the health of their natural environment.



A small but dedicated crew got the planting over with early then joined me, the Waimaori Stream-care programme coordinator/facilitator, at the stream to learn about the life within, and find out how to go about monitoring the site for water quality.

A couple of scoops with a hand net and we had koura (freshwater crayfish), tiny common bully, and a number of mayfly, caddis and dobsonfly (toe-biter) larvae.

Kaitiakitanga means guardianship and is customary to Māori. Adopting kaitiakitanga ensures we take action in caring for our children – our future. Children thrive on opportunities to be kaitiaki or guardians, feeling a sense of empowerment about positive changes they can play a part in.

Waimaori is based on the DOC programme "The Whitebait Connection", a nationwide initiative set up to -

- Teach about whitebait (the young of up to 5 species of native NZ freshwater fish inanga, koaro and 3 types of kokopu).
- Give people the skills and understanding to better manage their catchments.
- Promote community care and action that results in improved water quality.

The aim of the Waimaori programme is for schools and communities to act as kaitiaki and adopt sites along their local stream in order to:

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- Carry out seasonal monitoring of water quality at their site.
- Plant native trees and grasses at their adopted site, or nearby.
- Gain the skills and knowledge to measure water quality.

Here is how Waimaori can benefit your group/organization/students

- L It's fun!
- Learning takes place in and around local streams
- Māori tikanga (karakia/prayer, kaitiakitanga) and Māori values (mauri, Māori worldview of freshwater) are observed and explained.

The programme includes:

Protection and restoration of freshwater habitats

Students learn the importance of shaded borders along waterways, and are urged to get involved with planting at their adopted stream. Riparian borders also act as a buffer to pollutants and stock that may enter the waterway.

Environmental science and biodiversity

Waimaori streamside workshops make use of the SHMAK (stream health monitoring & assessment kit) to measure clarity, pH, temperature and rate of flow.

□ Identification of stream life - bugs (macro-invertebrates) & freshwater fish.

Students work together, searching the stream for bugs, which they put into a container of water for identification. Bugs are indicators of water quality. We discuss the results and draw conclusions.

Kaitiakitanga/Guardianship

The Waimaori programme actively promotes kaitiakitanga by incorporating action-based activities. These include planting along the stream, water quality monitoring and checking biodiversity.



This is a free programme, easily adapted to teacher's needs. Waimaori links to curriculum areas such as social sciences, science, community health and wellbeing. This programme encourages students to carry out their own investigation, problem solve and take action. Workshops are for a minimum of one hour, or maximum half day.

We encourage re-visits to the stream over time – "adoption" of school's local waterway, but can easily adapt to suit your timeframes and requirements.

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Sir Peter Blake Youth Environment Forum 2010

This year our region was represented at the Sir Peter Blake Youth Environment Forum in Wellington by Kate Smith from Motueka High School and Chloe Price, Laura Hampson and Meg Brodie all from Nayland College. The Sir Peter Blake Trust website (<u>http://www.sirpeterblaketrust.org/environment/youth_environment_forum/</u>) describes the forum as:

"This annual event is run in partnership with the Ministry for the Environment, held in Wellington. All sixteen regional councils in New Zealand are invited to select up to 3 young environmental leaders (15-18yrs) to represent their region at this national forum. Students are hosted for four days of workshops and activities culminating with a presentation of their projects to invited guests at Parliament Building's Grand Hall.

Projects typically focus on important topical environmental issues such as e-waste, water conservation, sustainable households, climate change and invasive species. The Forum is hands on, student driven and is designed to inspire and build the capability of young environmental leaders. On returning to their regions they are encouraged to continue with their environmental work and help lead other youth in the environmental stewardship."

Every year Nelson City and Tasman District Councils invite year 12 or 13 students who are passionate about environmental issues and interested in environmental leadership to apply. Airfares and accommodation are paid for and delegates have the opportunity to gain direct experience in taking environmental action and learn from experts in their field.

Sir Peter Blake Youth Environment Forum 2010 continued -

When some of this year's delegates were asked to pinpoint the highlights of attending the forum a common theme was the value of mixing and working with like minded peers:

Meg - "I felt we gave more than lip service to important environmental issues. The people, the discussions, and the food were all great!"

Laura - "I enjoyed meeting people from all over New Zealand that had the same interests and were as passionate about the environment as we were. It was good to be surrounded by such like minded people". Chloe - "Like Laura I loved meeting all the other teens we had so much in common with- it was so inspiring! Speaking and parliament and doing some wellington sightseeing of Eco initiatives were highlights as well." Congratulations to our 2010 delegates and best of luck with your continued environmental work and leadership. For more information on the Sir Peter Blake Youth Environment Forum check

http://www.sirpeterblaketrust.org/environment/youth_environment_forum/)

or contact Jo Martin at NCC or Rob Francis at TDC.

Quote from Sir Peter Blake

"Having vision is not enough. Change comes through realising the vision and turning it into a reality. It is easy to espouse worthy goals, values and policies; the hard part is implementation."



Laura, Meg and Chloe







The Big Beach Clean Up

– A big community spring clean of Tasman Bay beaches and other coastal areas between Marahau and Cable Bay is planned for Saturday 20th November 11 am to 3 pm. That's 50 beaches!

Get involved - register on the DOC website <u>www.doc.govt.nz/getting-involved/events-and-awards/regional-</u> <u>events/nelson-marlborough/big-beach-clean-up/</u> - choose a section of beach.



Department of Conservation Te Papa Atawhai

Activity 1: Leafy Gift Wrap

Add your own leafy design to tissue paper to make some lovely gift wrap. For this project you will need:

- Collect some leaves of different shapes and sizes
- some gold, silver or brightly coloured paint
- 1 x paintbrush
- some tissue wrapping paper (white or coloured)
- 1 x newspaper



Choose a leaf and place it on a sheet of newspaper. Paint right over it, making sure it is well covered in paint. Carefully pick up the leaf and press it, painted side down, onto the tissue paper.

Activity 2: Paper pot

It's easy to make your own plant pots out of newspaper and they are perfect for starting off sunflowers.



Plant the seeds in spring.

For this project you will need:

a jam jar with straight sides

newspaper

sunflower seeds

compost (soil)

a spray water bottle





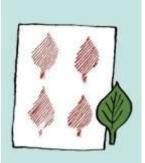








- 1. Take a double sheet of newspaper and fold it along the crease, then fold it again lengthwise.
- 2. Wrap the newspaper around the jam jar with the folded side level with the bottom of the jar.
- 3. Squash the excess paper at the top of the jar, inside the jar.
- 4. Remove the jar, flip it over and press it in again to flatten the squashed paper. This makes the bottom of your recycled pot.
- 5. Fill your recycled pot with compost and plant 2 sunflower seeds approximately 4cm deep. Then place it in a warm spot, near a window. Keep the compost damp by spraying it with water
- 6. When the seedlings appear, pull out the weakest ones.
- 7. Once there is no further danger of frost, plant your sunflower in your garden still in its pot. This will slowly rot away.



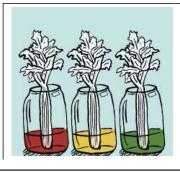
Activity 3: Traffic lights celery

This project demonstrates the process of osmosis, which is how plants draw water from their roots and spread it round their entire structure.

For this project you will need: celery, 3 jars, red, yellow, green food colouring

Break three stems off a head of celery, keeping the leaves on

Place each stem in a jar of water, and add red, yellow or green food colouring to the water.







Watch what happens to the celery over the next few days!

Activity 4 - Pine bird feeder

Treat your garden birds to a pine cone feast this winter. For this project you will need:

- 1 large or 3 small cones
- half a cup of vegetable shortening or lard
- 2 cups of porridge, oats, wild bird seed, nuts and dried fruit (optional)
- bowl and plate, wooden spoon and string. Mix the vegetable shortening and oats together in a bowl with your spoon

1 - Mix the vegetable shortening and oats together in a bowl with your



2 - Tie one end of the string to the stem end of the pine cone.

4 - Tip some wild bird seed onto a plate and add chopped nuts and dried fruit if you have some. Roll the cone in the mixture until it is covered.



3 - Using your fingers or the back of a spoon, press the fat mixture into the cone





5 - Hang the cone from a tree or post and watch the birds enjoy it!



How to build a bumblebee nest -

As honey bee numbers fall in NZ because of the Varroa mite we can all help pollination rates by providing Bumble Bees with homes.

Tools and materials

A terracotta flower pot (20 cm or bigger)

A matching tray for the pot – it will be a rain cover A square of chickenwire

Some mosquito netting (or fine mesh plastic netting) Something for fixing the netting to the inside of the pot like self adhesive velcro strips or glue

- A 30 cm. length of plastic hose this has to have an *inside* diameter of at least 18 mm.
- A nail slightly longer than the hose's outside diameter

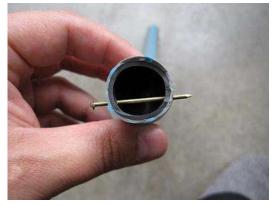
- Tin shears (or something else for cutting chicken wire)
- Glue (that will stick to the pot and mesh)
- Pair of pliers
- Scissors
- A drill with a reasonably large masonry drill bit (or something else that will pierce terracotta without breaking it)
- A hammer
- An awl or some other sharp tool for making holes through the garden hose

Bumblebee nest ventilation Like most other animals, bumblebees don't get much done if they're too hot. To make sure the nest doesn't overheat, we have to provide at least two, preferably three ventilation holes. Most terracotta flower pots will already have one in the bottom.









They holes just need to be big for air to pass easily through. So, use the masonry drill bit and make two holes on opposite sides of the flower pot. Keep them near the bottom of the pot (this will be the top of the nest).

Keep the flower pot steady while you drill. Start out carefully - the drill will slip easily at first. Don't push hard; it increases the chances of the pot cracking up. Let the drill bit do its thing. We need to keep roving ants out of the nest – hence the mesh Provided it's finely meshed, it will let air through but block ants. Cut out a few pieces of netting and fix them with glue to the inside of the pot, covering the holes completely.

Chickenwire cradle

Next up is a cradle for the nesting material.

It's important that the nesting material doesn't get wet, or it will get moldy. Cut out a square of chickenwire that will almost cover the wide end of the flower pot. Use the pliers to bend the corners of the square. The corners should work as feet for the cradle. Also bend any sharp wire points inwards, below the cradle. When you're done bending the corners, set the cradle down and make a dimple in the middle. The end product should look something like this:

The nest entrance

Bumblebees aren't the most demanding in terms of grand entryways. As long as it's an obvious tunnel that ends somewhere dry and cozy, they're happy. Which means our length of hose fits the requirements quite nicely

To make sure the nest and the entrance tunnel is kept dry when it rains, we have to make some drainage holes in the hose. Make several holes near the middle of the hose length, along the outside curve.

Run a bit of water through the hose to make sure the holes are big enough to work as drainage.

We need to keep slugs out of the hose as they will block bees form getting in and out. So we run the nail through the hose, close to one of the ends. Make sure you run it through slightly offcenter. This should work as a discouraging roadblock for slugs, while still letting the bumblebees pass.

Finding a good nest site

You will need a shovel and some nesting material such as dried moss or grass clippings, bedding from a pet shop or upholsterer's cotton.

Bumblebee nests should be placed in a location that gets little or no sun and is sheltered from the wind, too.

Hedge bottoms, raised banks, along solid fences and under garden sheds are all typically good candidate sites. Most species prefer an entrance at ground level.

Keep in mind that bumblebees need access to flowers, so find a location with a good selection of them within a kilometre.

Placement - The nest should be partially buried, dig a small and shallow trench, just long enough for the flower pot and the length of hose next to each other. At one end put a layer of small stones down to aid drainage. The chickenwire cage will go on top of this. Then lay the hose in the trench with the nail pierced end of the hose way from the pebbles. The next thing to go in, is the chickenwire cradle. Push it into the dirt and pebbles so it's not easily dislodged, but keep the top above the dirt. Put the nesting material on top of the netting for the queen to arrange as she likes. Put dirt all around the flower pot, blocking all entrances

but the hose. Put dirt over the hose, too, but leave a short section jutting out. Again, make sure you don't get dirt inside the hose.

Natural bumblebee nests are often in abandoned mouse nests. To make your artificial nest look more like this, you can scrape away any grass and other plants immediately surrounding the entrance.

Now it's time for the most important thing: The modified flower pot. The pot will function as the actual nest. Place it upside down, with the rim covering the end of the entrance hose. Make sure the hose isn't blocked by dirt.

Rain cover

The final step is providing some rain cover for the bumblebees.

Lay a few small pebbles on top of the pot and then place the tray on top of the whole shebang, upside down. The pebbles help air circulation. Weigh the tray down with a few rocks to lessen the chances of investigative animals knocking it off. That's it, you're done!

Now just sit back and hope the bumblebee queen will deem your creation worthy of her residency.

Resist the urge to inspect the nest too closely – especially for the first few weeks – if you disturb the queen while she's establishing herself, she'll probably move on to somewhere else.

Don't get too disappointed if no-one moves in – sometimes you have to wait a couple of years!

With any luck, if bees don't use it a mouse will nest in it, and increase the chances of a bumblebee queen finding it to her liking when the spring comes.



The finished product!



