

Eco Buzz

Edition #33

Term 1, February 2009



What's Inside?

- **Waiora (Healthy Water)**
 - Sea and freshwater information. How your class can learn about local waterways.
- **Seaweek poetry competition**
- **How kids and teachers get to school**
- **The Waste Wise challenge**





Rob Francis.

Kia ora koutou ki te tau hou

When I heard the themes for this issue, water and transport, I thought, why not combine? Here's what I came up with:

- As we know, cars are a terribly inefficient way to move people around. In only 10km of car travel, a person requires the same amount of energy that could transport them as cargo (aboard a ship) around the world.
- A Sydney-based company, Solar Sailor, is supplying two Chinese commercial ships with high-tech, energy-generating sails. The giant 'wings' are as big as a large aircraft and capture the sun's energy (they are covered in solar panels) while harnessing the ocean wind. The panels will provide 5% of the ship's electricity and harness enough wind to reduce fuel costs by 20-40%.
- Since 1994 the Moss family has been active in the research and promotion of Sustainable Transport, particularly using solar technology. They have produced solar-powered road vehicles and boats. One project is to convert the traditional passenger boats of Kerala, in India, to solar

power. The converted boats are ideal – stable and slow-moving and efficient at low speeds – and there's plenty of sun. And they no longer have the noise, emissions and pollution of the fossil fuel-driven outboards and motors. Check out www.mossolar.com

- In 1998 in Mexico, Richie Sowa created his own island, built upon a floating collection of 250,000 plastic bottles, all netted together to support a bamboo and plywood structure above. The structure supported full-sized mangroves, a two-storey house, solar oven, composting toilet and beaches! Unfortunately the island was destroyed by a hurricane in 2005, but now Richie is building another one. His ultimate goal is to build the island bigger and float out to sea, travelling the world on his own private paradise. Have a look at www.spiralislanders.com

Follow your passions, and have a great term.

Rob Francis

Environmental Education Officer Tasman District Council

Ph: 03 543 8484

email: rob.francis@tdc.govt.nz



Karen Lee.

Kia ora

A big welcome to 2009 from your environmental education team at Nelson City Council. It's going to be a busy and exciting year. Watch out for information on events and activities taking place nationally – the Environmental Education Events and Theme Days calendar will have been delivered to your school before the beginning of Term One.

Each year Nelson and Tasman Councils choose one event to focus most of their resources on and this year it is Conservation Week, September 7-14. We will run field trips and there will be lots going on, so mark it in your diary. Less focus will be given to Seaweek this year, but we are running a poetry competition for school-age children so keep an eye out for the posters.

Nelson City Council is continuing to sponsor environmental education programmes for the school community. Our EnviroSchools programme is going from strength to strength, with several schools gaining their bronze or silver

awards in 2008. EnviroSchools offers a strong framework to support environmental education in the curriculum, and our facilitators will always be happy to come and talk to you if you would like to know more. Waste Education Services will continue to provide advice on waste reduction programmes – watch out for their zero waste challenge in Term Two.

This year, as well as promoting the air-quality message, Jo will be working as the key contact for Nelson schools. She will be in touch during the year to alert you to upcoming events and provide support, so please feel free to contact her at any time on 545 8728 or email jo.martin@ncc.govt.nz.

Best of luck with planning for the new year, and if we can help in any way please don't hesitate to contact us. We're looking forward to working with you.

Karen Lee

Sustainability Coordinator

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email: karen.lee@ncc.govt.nz

Jo Martin

Environmental Educator

Ph: 03 545 8728

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Claire Webster.

Kia Ora Tatou

This issue of EcoBuzz is arriving to you a little later than normal – so hopefully you have the time to read it and make use of the contents. Still, welcome back to another year of teaching.

The theme of Waiora (Healthy Water) – Oceans and Freshwater will be relevant for many as it's been a hot summer. This means the water tank is low on rainwater, the vegetable garden is stressed and farmers are worried. Equally, it means many people are off to the beach or local swimming hole in the river to cool down – living in a country and region where so many of us have ready access to a water body is a blessing, to be sure. One of our challenges as Educators is helping others to understand how precious this is, how rare in the world, how important it is we look after it and never to take it for granted. What a tiny percentage of available freshwater there is on "Planet Water" – less than 1%.

I'm very aware at the moment of how all my actions have consequences – some positive and some negative. Becoming aware of the negative ones, accepting responsibility and then changing my actions to reduce them or fix them is the key to my personal sustainability efforts.

Didymo, the invasive alga otherwise known as "rock snot", is a good example of this – humans are moving it around our waterways at an alarming rate – yet all we need to do is wash

everything that has been in contact with the river, stream or lake in a 5% solution of laundry power, dishwashing liquid, bleach or even saltwater. Thoroughly drying or freezing are also good options. Simple, yet it's so hard to change habits. And there are consequences – rivers that now look like this! (photo right)

So my challenge is to become more aware of and responsible for my actions. What is your personal focus this term?



Handfuls of didymo.

Claire Webster

Environmental Educator & Enviroschools Facilitator/contractor
Tasman District Council
email: claire.webster@tdc.govt.nz

The main themes for EcoBuzz this year are:

- Term 1 – (1) Waiora (Healthy Water), "Planet Water" – Seaweek and freshwater / (2) how kids & teachers get to school.
- Term 2 – (1) Zero Waste challenge for schools, WeedBusters / (2) Matariki.
- Term 3 – (1) Sustainable practices (Ecofest) / (2) Conservation Week.
- Term 4 – (1) Get growing plants & healthy soil / (2) Eco-Buildings.

We welcome contributions from teachers/schools. Don't you love to hear what is happening at other schools in the district? Please share your efforts with us.



1 March – 8 March 2009 Photo Competition Amateur Photographers Only

Email us a photo (nelsonvc@doc.govt.nz) showing a human impact on the marine environment (positive or negative), or a rock-pool scene (kids only) by 5pm on the 13th of March.

Best entries will be displayed at the Nelson Regional Visitor Centre, from the 23 March – 26 April 2009. Terms and conditions apply- contact the Nelson Regional Visitor Centre for further details.

Open category: (Human Impact)

\$100 Gift Voucher – 1st
\$60 Gift Voucher – 2nd
\$30 Gift Voucher – 3rd

Kids category: (Rockpool)

\$50 Gift Voucher – 1st
\$30 Gift Voucher – 2nd
\$20 Gift Voucher – 3rd



Kate Cobb.

The EcoBuzz Guest Speaker: Kate Cobb

I was very pleased to be asked to write the Guest Speaker slot for EcoBuzz this term. To be honest, I am still pinching myself to check that this is real. It doesn't seem that long ago since I was sitting in a small house on a miserable, grey day in

Britain dreaming of lying on a beach in New Zealand. Never once did I imagine I would be living in one of the most beautiful places in the world and have a dream job as the icing on the cake.

So, how did I get here? A potted history in less than 100 words. I was born and raised in a small rural village in the middle of England. I met my now husband Rory while I was at high school there. Once I had gained my degree from Durham University, we spent six months travelling in New Zealand – which sowed the seeds of our desire to move here permanently.

Back in England, I enjoyed teaching upper primary classes in a large, urban school in Hampshire for four years but the draw of NZ was too strong. Our next step – as for most migrants – was Auckland and I taught at Meadowbank, a Green Gold EnviroSchool. However, we were keen to swap the “big city” lifestyle and headed down to the Top of the South at the beginning of 2008. Shortly after arriving, I was appointed as an EnviroSchools facilitator and am now thrilled to be taking

over the role of EnviroSchools Regional Coordinator too. I live in Foxhill, just outside Wakefield, with our gorgeous golden retriever puppy, Bentley. A couple of sheep and some chickens are due to arrive soon.

We are all very lucky to live in a place where it is easy to feel connected with nature. There are so many beautiful places we can spend time in and be filled with awe about our world. Among my favourites are the top of the Golden Downs forest, Lake Rotoiti and anywhere in the Abel Tasman National Park. On top of that, I enjoy spending time in my own garden. I don't think I will ever get over the magic of placing a tiny seed in the veggie plot and a few weeks later being able to eat the tasty treats that I have grown. Having this link with our environment leads to a strong desire to protect and care for what we have and make sure that we do our bit to tread softly on our piece of paradise. And as educators, we have the opportunity to share our passion and enthusiasm with many – and that really is a privilege.

I look forward to working with you and doing what I can to help you create sustainable learning environments that are a joy to be in, for all.

Wishing you all the best for 2009,

Kate Cobb



Seaweek

2009 Poetry Competition

Only open to school-aged students during March 2009 in Tasman and Nelson regions. Write a poem titled

“More than meets the eye”

What is under the surface of the sea?

Win a \$50 or \$25 book voucher or free entry to the Mapua Aquarium. One poem per student.

Entries close March 6, 2009

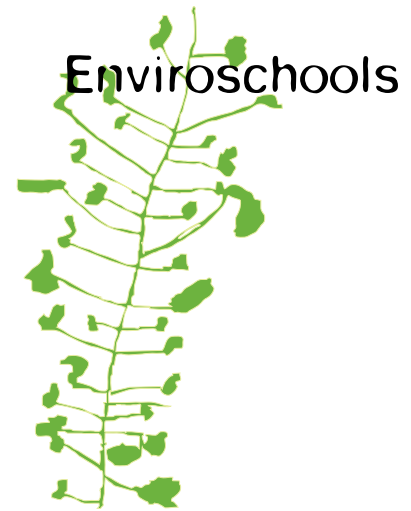
Post your entries – they must be on A4 paper and sent to:

Jo Martin at NCC, PO Box 645, Nelson 7040
or Rob Francis at TDC, Private Bag 4, Richmond 7050.
Or email poem as an attachment in Word to
jo.martin@ncc.govt.nz
rob.francis@tdc.govt.nz

Entry forms are not at schools.

ENVIROSCHOOLS – Newsletter (T1 2009)

Written by Kate Cobb



Reflecting on 2008

2008 was an exciting and successful year for Enviroschools in our region.

We had a number of firsts last year, with a regional bus tour for primary school pupils and their teachers and our first independent regional awards ceremony. We had a record number of schools achieving Enviroschools awards in 2008. Congratulations go to Hira School, Garin College, Collingwood Area School, Nayland College and Dovedale School for achieving their bronze awards, and also to Nayland Primary, who have reached the silver award level. While all those on the Enviroschools journey know that the awards aren't the sole focus, they do provide us with a chance to reflect, share and celebrate our successes along the path of creating a sustainable school.



Kate Cobb.

2008 was also a time of growth for Enviroschools in our region. Thanks to additional funding from Tasman District Council, we were able to increase the number of schools subscribing to the programme. The network now consists of nine schools from Nelson, 10 from Tasman, three from Golden Bay and two Early Childhood Centres. We also have a few schools trialling the programme to see if they are ready to take the next step.

We have also had some staff changes. Sarah Langi has returned from New Caledonia and resumes her role as the Enviroschools facilitator for Nelson schools. Kate Cobb is now the Regional Coordinator as well as facilitating for Tasman schools. Rob Francis, Environmental Education Officer for Tasman District Council, joined the team in 2008. Karen Lee and Claire Webster continue their roles at Nelson City Council and Golden Bay respectively. The team would like to wish Keryn Squires all the best for her future endeavours as she undertakes a music therapy course in Wellington.

Looking forward to 2009

The Enviroschools team are geared up and ready to go. In 2009 our team of facilitators will:

- Increase professional development opportunities for teachers.
- Build a strong network between teachers, schools, pupils and other regions.
- Help schools to embed the five guiding principles in the four key areas.
- Encourage schools to establish small EE curriculum groups, rather than relying on just one lead teacher.
- Hold another regional tour for primary school Envirogroup members.
- Be part of key events such as Ecofest and Conservation Week.
- Raise our profile in the region and nationally.

We're going to be busy

The team are really pleased to be able to offer more PD to teachers in 2009. Every term we will hold a focused cluster meeting at various locations around the district. This will give teachers the opportunity to be updated on any Enviroschools developments, get a better understanding of the resource kit, receive training for new projects, share ideas, collaborate on joint ventures, find out about funding opportunities etc. The first meetings will be held in March and we will explore the changes to the Enviroschools handbook and share tips on establishing an active Envirogroup.

As always, the team of facilitators are here to help. If there is anything you need, please do not hesitate to contact us for advice and support.

For all our Enviroschools – a sneak preview to a fabulous challenge Huts to be built by kids in 2009!

EcoHut Challenge 2010 invites Enviroschool-age students to design and build an ecological habitat on their school grounds that enhances all living things around it.

The goal is to shift the view that ecological design merely aims to reduce the impact of building on the environment. It is much more than that – an ecological building should add significant benefits to the ecosystem it is situated in.

A variety of investigations will be made. How can habitats be designed to support nature to grow; to convert and distribute natural energy; to nourish the soil and other creatures; to provide natural warmth inside from harsh winters; to express the culture of our local community?

Imagine hundreds of youth-inspired EcoHuts dotted all around the nation. The small and achievable nature of these structures make ecological building design more realisable and able to be mainstreamed. If young people show competency in creating eco-buildings, then society is compelled to follow.

Furthermore, let's use the EcoHuts to show a way forward, by contributing to revisions being made in current building industry and government policy, to implement a sustainable approach to building.

Join us in building the dream

Key dates:

March 2009:	Launch, registrations + toolbox (info pack) mailout
Mar 2009 -Mar 2010:	EcoHut design + building stages
March 2010:	Regional judging
April 2010:	Awards



Environmental Education – The Silly Things I Have Done

A retrospective from Keryn Squires



Keryn Squires
“Keryn impersonating a rare red-breasted stream frog”

2009 is going to be a time of positive change, I can feel it in my toes and fingers. My big change is that I am heading off to pursue a Masters in Music Therapy. Yes, the truth is out... I have interests other than the environment. So the wonderful team of motivated and creative thinkers who make up our region’s Environmental Educators will continue without me. “So long and thanks for all the fish” (hint – read Douglas Adams).

Times have changed somewhat since 2001 when I was doing worm-farm compost workshops and I was known as the “worm lady” – the worms in composts, not in the other places! (A little tip from a seasoned Worm Lady – you can make a great Worm Lady hat by buying lots of long red balloons, blowing them partially up into little, long, red tubey things, and threading them onto the outside of a straw hat.)

And then there was the Fresh FM Biodiversity show that I did every Tuesday morning for Matt Lawrey... now they were fun. Matt actually managed to get me to do a little blue penguin birdcall impersonation over prime time morning radio – which he replayed regularly! He even won a radio broadcasters’ award with the help of my birdcall.

I’ve also been reminded of the time I dressed up in a two-headed kiwi costume (GE mistake) for

the opening of the Brook Waimarama Wildlife Sanctuary. Unfortunately it backfired as most of the children seemed to be scared of my kiwi, bursting into tears when I approached them. The bolder children taunted my kiwi and pulled on the tail feathers – hmmm, not a great look for biodiversity.

I’m sure every Environmental Educator has similar silly stories, and we’ve all dressed up in badly fitting animal costumes for the cause, haven’t we? So as I hang up the kiwi costume for now, I am heartened to hear our leaders in the community supporting the EE programmes that we have been working so hard on for the past decade. I’ll end on a quote from Rachel Reese, Nelson’s Deputy Mayor, at the 2008 EnviroSchools Awards Ceremony:

“We (councils) believe in providing the next generation with the tools to make informed decisions for our environment in the future. The self-motivation and positive attitude of the award winners is really quite inspiring – well done to these young community leaders.”

And I add to this, well done to all the visionary Environmental Educators out there.

Cheers, Keryn.



The Kiwi Conservation Club is the kids’ section of Forest & Bird and aims to encourage New Zealand kids to enjoy, empathise with and understand the New Zealand environment and the plants, animals and insects that call it home. KCC produces the Wild Things magazine 5 times a year which presents information on topics such as Marine Reserves, Wetlands, Rats, Native Birds and Night Time in an easy to understand format for kids. The

KCC website www.kcc.org.nz is used widely by students within classrooms and at home for conservation based projects. Individual memberships are available from \$19 per year and school memberships are also available.

For teenagers and adults we also produce our Forest & Bird magazine that provides in depth information about current conservation issues in New Zealand and fantastic profiles of

some of our unique wildlife and wild places. Memberships of Forest & Bird start from \$45 per year with school memberships also available.

Forest & Bird and KCC also have a wide suite of education resources such as those provided in the EcoBuzz kits. For more information see www.forestandbird.org.nz or contact Forest & Bird on 0800 200 064 or membership@forestandbird.org.nz



New for 2009

Focusing on the topic Reduce Your Waste, the most important aspect of waste minimisation, a new classroom presentation/resource is on offer this year from Waste Education Services (WES).

The presentation includes ideas and fun activities for “litterless lunches” and other ideas for reducing waste, smart shopping ideas to reduce packaging, and lots more.

This is in addition to the current WES programmes on offer. These include waste audits, assistance with developing policies on whole-school waste minimisation, and workshops/advice on setting up recycling systems, worm-farms, and bokashi and composting systems.

To book a free session, or for help with any waste-related information, please contact Sarah.



Zero Waste Challenge: Watch This Space

Enter the Zero Waste Schools Challenge in Term 2 and be in to win in more ways than one! A chance to revitalise your school's Reduce, Reuse, Recycle programme or take the next step towards creating a sustainable school. Recognising that all schools are at different stages along the journey to zero waste, the challenge is open to all schools in Tasman and Nelson.

Prizes will be awarded for:

- The school that makes the most progress along the road to zero waste.
- The school that is closest to achieving zero waste.
- The wackiest idea for waste minimisation (one that's not on the list).
- The most efficient waste minimisation scheme.
- The school with the largest percentage of pupils involved.

Spot prizes will also be awarded for individual projects that are running really well.

More information will be sent to each school at the beginning of Term 2.

The final date for entries is June 5, which is also World Environment Day and World Arbor Day.

Results will be announced by the end of Term 2 (July 3).

For more information, please contact:

Sarah Langi, Waste Education Services Schools Facilitator, Nelson and Tasman.

Email: sarahlangi@nec.org.nz

Phone: Nelson 03 539 0499

Golden Bay schools please contact Claire Webster at Tasman District Council, Takaka.

Email: claire.webster@tdc.govt.nz or phone 525 0020 (Tue, Wed and Thu)



The NZ Transport Agency would like to invite you and your school (Year 1-8 pupils) to participate in Feet First Walk to School Every Week in 2009. Have a look at: www.landtransport.govt.nz/feet-first

Walk to school in 2009

Some exciting changes have been made to Feet First Walk to School this year. The campaign has been developed to support the school-based curriculum and will be operational in all four terms of 2009.

Feet First Walk to School Every Week goes further than just encouraging the physical act of walking. The NZ Curriculum says learning in the 21st century should “provide opportunities to practise using (not just having) knowledge”. All schools will have access to Feet First curriculum resources to support the benefits of walking.

Term 1 – Road safety

This is a focus on walking safely to school and an optional website participation project for...

Term 2 – Walk and explore

Term 3 – Walk and learn

Term 4 – Walking and helping the planet

Every term there are 10 x \$500 sports vouchers up for grabs. Schools that enter walking numbers will be in a draw each term. Each school will have the opportunity to submit one illustrated story about “How we used to walk to school”. Your story could become a published book.

Throughout the year classes will have the opportunity to:

- Produce stories that connect good health to using active transport.
- Produce comic strips/graphic novels on themes connected to active transport.
- Produce YouTube video clips on the theme of active transport and mobility linked to map pins.

For further information contact Sarah Downs, Ph 543 8542 or schooltravelplanner@tdc.govt.nz.

Some inspirational websites to check out:

- www.thebigask.be/nl/node/411 The short film is very clever, with a great message for us all from the mouth of a child.
- www.freerice.com/totals.php Check out your vocabulary or geography skills (and more). All your correct answers donate rice to those in living in poverty. Do good while you learn.
- www.earthday.net/lilpeppi Nine-year-old rapper lays down cool tracks for a warming world. If you haven't heard of Lil' Peppi yet, you're in for a big surprise: This third-grader from Florida is putting eco-rap on the map with his talent for crafting rhymes for the times. His first single, Mother Nature's Crying, is a YouTube sensation, and he is repeating success with his second hit, Melting Ice. A cooler world never sounded so hot.
- www.mfe.govt.nz/withyou/youth/index.html

MFE Youth Environment Forum

2009 Youth Environment Forum dates are Sunday 19 April to Thursday 23 April 2009. Six students aged 15 to 18 will be selected from the region to represent Tasman and Nelson. Contact Rob Francis at TDC or Karen Lee at NCC to find out more.

The list is exhausting and depressing. The planet that our young people are inheriting, in which they have to live and plan for their own children, is compromised. How can 48 young New Zealanders solve this multitude of environmental problems?

This annual event is run in partnership with the Ministry for the Environment, held in Wellington. All 16 regional councils in New Zealand are invited to select three young environmental leaders (15-18yrs) to represent their region at the forum. Students are hosted for four days of workshops and activities, culminating with a presentation of their projects to invited guests at Parliament's Grand Hall.

The forum is hands-on, youth-driven and is designed to inspire and build the capability of young environmental leaders. On returning to their regions delegates are encouraged to continue their environmental work and help to lead other young people in the environmental stewardship.

Projects typically focus on important topical environmental issues such as e-waste, water conservation, sustainable households, climate change and invasive species.



Welcome to 2009, educators.

It's Shine here, educator for the Brook Waimarama Sanctuary (BWS), Nelson's own community wildlife conservation project in our backyard – well, less than 10 minutes' drive from Nelson City anyway!

This looks to be extra exciting year for the sanctuary project. Approval from the council for our proposed line of predator proof fence means that our resource consent process can start and fundraising can really kick in to support the donations and funds already raised in the past year or two.

Below is a list of some of the educational opportunities at the sanctuary. However, I want to take this chance to tell you about the March/April Koura Kraze!

BWS is collaborating with the Environmental Monitoring and Action Project (EMAP) as a venue for March Monitoring Month and the associated Koura Kraze!

The aim of Koura Kraze is for your school to report details on any koura that you find when out doing your stream monitoring activities during March and April. In addition to collecting your regular monitoring data, we ask you to take down some details about where you did or did not find koura, and details about the habitat you sampled from.

EMAP website <http://emap.rsnz.org/events/marchmon/>

Educational Experiences at BWS

- Learn about New Zealand's special birds
- Why is New Zealand so special?
- The role of a sanctuary
- Biodiversity at the Brook
- Identifying native and pest plants
- Stream investigation and monitoring
- Historic use of the Brook
- Pest control – how do we do it?
- Service work – making a difference at BWS!
- Yr 11-13 technology projects
- Birds and their adaptations
- Eco-sourcing for propagation

To get more information about educational programmes at the Brook Waimarama Sanctuary contact us.



Koura are a small freshwater crayfish endemic to New Zealand (that means they are not found anywhere else in the world). They are a great indicator of the health of waterways.

Are you going to be part
of Koura Kraze at the Brook
Sanctuary in March?



Shine Kelly

Brook Waimarama Sanctuary
email: education@brooksanctuary.org
www.brooksanctuary.org
brookwaimaramasanctuary.blogspot.com
PO Box 744, Nelson, New Zealand
Ph (03) 546 9175 ext. 304

Where There's Water Community Environmental Grants

Funded by BOC and administered by NZWWA.
www.nzwwa.org.nz/wherethereswater

The next funding round will close on 15 May, 2009. Get in early and start brainstorming new project ideas today.

Where There's Water Community Environmental Grants provide funding to help the community understand, maintain, protect and improve their water environment. This includes streams, rivers, lakes, wetlands, estuaries and beaches in urban and rural areas. The grants were initiated by the staff of BOC in New Zealand and the fund was launched in June 2002. BOC provides all of the funding for the grants and the New Zealand Water and Wastes Association (NZWWA) administers Where There's Water on behalf of BOC.

Please note: Funding decisions are strongly influenced by the degree of hands-on participation that the projects offer to those involved, ie. pupils and/or community members.

Who can apply?

Grants are available to schools, community groups and other non-profit organisations, for environmental projects that have a water focus. Applications for funding of between \$1,000 and \$5,000 will be considered.

These projects should have public benefit rather than private gain.

Project examples:

- A primary school cleaning up a local stream requires \$500 for rubbish bags and skips and \$500 for trees to plant on the stream bank.
- An estuary care group restoring a wetland requires \$2,000 for earthworks, fencing and pedestrian pathways. The project brings together various community groups to implement the restoration.
- Teachers wanting students in their school to participate in a water education programme require \$1,000 to buy testing kits, manuals and native plants.

How about getting your school to adopt a Hector's Dolphin – it costs just \$30 a year.

Money raised from adoptions is used to fund the WWF – NZ Hector's/Maui dolphin conservation programme. The overall aim of the WWF programme is to protect the future of Hector's dolphins by securing a self-sustaining population that can live in its traditional range and is free of threats from human activity.

WWF for Nature – World Wide Fund
check out: www.wwf.org.nz



The Watery Planet



Apart from humans, what animal has been the most useful to the modern world – on land that is?

Planet Earth is a funny place. It's funny partly because it has so little "earth", and partly because it has a name that doesn't reflect the planet's true character – ie. water.

It is not surprising, I suppose, that humans, who are adapted to life on solid ground, tend to see the "solid ground" fraction of the planet as being the most important part. But with two-thirds of the place covered in salty water, and being the driving force behind the world's weather systems, the supplier of most of our oxygen, recycler of almost everything, food source, and sometimes home to the animal that has done more for the modern world than any other, we can't forget it.

The Deep Ocean

The most common habitat on the planet is the deep ocean. In fact there's more deep ocean than all the other habitats on the planet put together. But what lives down there? We are still just finding out – about 3 per cent has been explored so far. New species are discovered on most deep-ocean dives and sampling trips.

Specimens

Over the next two terms I will run an exciting new programme called Here Be Monster at the Touch the Sea Aquarium, looking at the deep ocean. I will have frozen deep-sea specimens to touch and marvel at. We will have our own simulated deep ocean to explore and we'll look at the technology involved in exploring a place that has seen fewer human visits than the moon.

by Richard de Hamel

Sustainability

How do we fish these waters? What technology is needed? How sustainable is that fishing? Many of the life-forms down there have strange adaptations to cope with the lack of light, the pressure, the cold, the lack of food and the unforgiving predators that snap up anything they find. But do these species have the ability to cope with fishing?

Dissection

We will learn about some of these creatures, including the colossal squid. Then, so we can fully appreciate what goes on beneath the surface, we will dissect a small squid and see (and smell) what makes it tick.

To book for the deep-sea Here Be Monsters programme or get information on this and any of the other programmes we run, call Richard de Hamel on 03 540 3755 or email richard.dehamel@otago.ac.nz

School Camps

A reminder that the aquarium is a great place to stop on the way to or from camp, or as part of the camp programme. I can also visit your class for rocky or sandy shore discovery sessions while you are on camp. I'm a phone call or email away.

So what is this animal that has been so important to human civilisation? The shag. Cormorants and shags are responsible for almost all the guano deposits that have fertilised the world's agricultural lands and have increased productivity enormously. And, of course, they get their food from the ocean.





March 22, 2009

Transboundary water

www.unwater.org/worldwaterday or www.worldwaterday.org

World Water Day 2009 – Transboundary Water

The theme for World Water Day is “Shared Water – Shared Opportunities”. Special focus will be placed on transboundary waters. Nurturing the opportunities for cooperation in transboundary water management can help to build mutual respect, understanding and trust among countries and promote peace, security and sustainable economic growth. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) leads the activities of the World Water Day 2009 with the support of United Nations Economic Commission for Europe (UNECE) and the Food and Agriculture Organisation of the United Nations (FAO).



International Poster Contest for Water Day

<http://naturesvoice-ourchoice.org/index.php/2009-Poster-Contest.html>

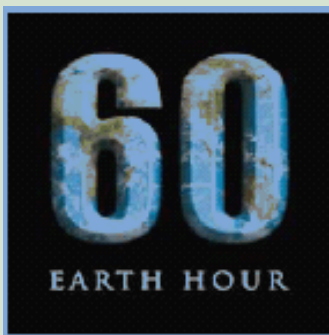
To celebrate World Water Day, we are holding our second annual international poster contest with the theme “Water and Culture”. Posters must be postmarked by 22 March, 2009 (World Water Day).

Posters will be judged on originality, impact and visual message. Winners will be announced on our website and contacted directly by 22 April, 2009 (Earth Day).

This year we will choose six winning posters from international students. Each will have the opportunity to create a community water committee, identify a community water resource problem and design and implement a solution with technical and financial assistance from Nature’s Voice Our Choice.

For details on the competition see the link above.

Contact: Brandy Lellou
email education@naturesvoice-ourchoice.org



Earth Hour

Earth Hour, 8.30 pm March 28, 2009. Turning off your lights for one hour is the first part of getting involved in Earth Hour. Making a difference to the future of our planet by making energy savings

every day is the second part. Why not get your class to take on the challenge of getting the childrens’ families onboard – how about the whole school?

www.earthhour.org

Matariki

Kia ora from Debbie Daniell-Smith, Arts and Heritage Team Leader at Nelson City Council.

We are looking towards Matariki in June and thinking of ways we can tie together the fact that 2009 is the UN Year of Astronomy, a desire to promote Maori heritage, and finding a way to interest children in artistic expression around these themes, whether that be reading, writing, singing, dancing or creating art.

On behalf of Nelson City Council we have commissioned a representation of the prow and stern of Te Awatea Hou – the ceremonial waka for the Top of the South. This lightweight papier-mache creation is being made by the Community Arts Workshop. It can be “worn” as it incorporates a shoulder harness, and is intended as a resource for schools that may wish to create songs and dances around the legends of Kupe and his faithful friends the dolphin, the shag and the octopus. It will first be used as part of celebrations to launch The Prow website on 15 February at Founders Park, then used as a display in the library. It will then be available for schools to borrow.

Each time it is used we will encourage people to make use of The Prow website. We will put up on the website the stories associated with the animals that feature on the prow, and make links with the constellations that appear in the sky at Matariki. We would like to have a display of artwork, stories and poems at that time at the library, and link other activities – maybe a walk at night to see stars or visit the observatory, a lecture on stars and legends at somewhere like The Suter.

Please contact me (Debbie.daniell-smith@ncc.govt.nz, or ph 03 546 0331) if you are interested and think the idea has possibilities you want to be involved in.



The Prow at Te Awatea Hou

The Prow (www.theProw.org.nz) celebrates, preserves and makes accessible the history, culture and stories of the top of the South Island of New Zealand – Nelson, Marlborough and Tasman. The name has been chosen because the region from Farewell Spit to Marlborough's East Coast has long been known by local iwi as “te tau ihu o te waka a Maui”, or the prow of Maui's waka,

from which he “fished” up the North Island. This website aims to provide an online resource of some locally focused stories and resources. It gives students and researchers the opportunity to dig deeper into each story, with lists and links to a wide range of relevant sources and resources. Some of the resources in the lists are available from libraries and museums, others are accessible online.

The Prow is a collaborative venture between the Nelson City, Tasman and Marlborough District Libraries, Nelson Marlborough Institute of Technology and The Nelson Provincial Museum.



WHY DO WE NEED TO CARE FOR OUR COAST?

New Zealand administers the sixth largest marine environment in the world. At about 4.4 million square kilometres, our marine environment is 14 times larger than our land area.



Activity one: From the Sir Peter Blake website - www.sirpeterblaketrust.org

Activity One-

Ideas for environmental group or class projects

Making a positive difference to the environment is best achieved in teams – one person can make a difference, but more people can make a greater difference.

Once you've taken the first step and formed your team, here are some ideas for possible projects:

1. Adopt a beach (river, stream or lake) and clean it up regularly.
2. Native tree planting at school or at a local park. Get in touch with your local council to find out where you can lend a hand.
3. Encourage a “reduce, reuse, recycle” programme at your school. Brainstorm how this needs to be managed effectively, so it will remain in place longterm.
4. Identify and remove pest weed species from the local area.
5. Establish a worm-farm at school to help manage waste. Consider the management of the farm: who, how, and when.
6. Run a creative arts competition, for example wearable arts, collage, sculpture and design, and give prizes for the best environmental idea or project, then implement it.
7. Produce stickers and other material to encourage peers and teachers at your school to save water and power. Make sure they know why this is important.
8. Promote walking and cycling to school to reduce the use of cars. Challenge others to incorporate this idea into their daily living, and not only for getting to and from school.
9. Examine the use of cleaners and other products around the school that could be toxic or harmful to the environment (e.g. weedkiller) and propose alternatives.
10. Stencil around drains: “I only drain rain”.
11. Create a pest eradication programme (e.g. for possums) for a local bush reserve. Get in touch with the local authority to guide your project team.

There are plenty of other great ideas that you will have – be creative, have a go and make a difference.



(kindly reprinted from the Enviroschools Kit)

Activity Two-Water Race

Water Race is an investigative activity that involves “flagging” (using cones or bright-coloured flags) to mark the places where water can be found in the school environment. Map as many discovered places and forms of water as possible. By looking for links between places you may be able to track flows of water entering and leaving the school at specific points. Extend your investigation beyond the boundaries of the school to the original source of the water and how it gets to the sea.

You will need:

A map of the whole school (copied on acetate).
Coloured markers for each group (e.g. fluorescent cones, flags tied to stakes).
Newsprint and felt pens for group work.
Map or aerial photo of your local area highlighting your school’s connection with the local water system (Council’s Engineering/Water or Planning Department may be able to help with these).

Preparation:

Safety rules and common sense are important for children going near places of water. If in doubt, adapt the activity and supervise children on a water walk, or have groups supervised by adults.

Devise a tactful way of surveying administration areas, such as office and staffroom, resource room, groundstaff areas and rooms that have a water supply.

1. Divide the school grounds up into six or eight areas.
2. In small groups, take one section each and brainstorm all the places where you think water can be found. Remember to look for less obvious signs outside, like where puddles form, drains, spouting, the pool, boggy areas etc. One group may decide to investigate the inside of buildings, like classrooms, hall etc. Keep communication flowing, informing the school community of what you are doing and why.
3. Draw a map of the area you will investigate and agree on a water symbol to mark the places before going on the Water Race. Write your names neatly on the top of your map and the area name. Keep your map attractive so others can read it once you have finished.

4. Check out your area of school environment, finding and “flagging” all signs of water. Note on your group map everywhere you see, smell or hear water being collected, stored, leaking or flowing.
5. Investigate the area carefully and confirm or change your map. Return to a central meeting point to discuss, as a group, the three most important things your group discovered about water in your particular area. What kinds of water have you discovered? Where is the water entering the area? Where is it leaving? Record these on your group map.
6. Swap your map with another group so they can check out your discoveries before returning to class.
7. Once everyone has returned, use the class map to finally record all places discovered, using different symbols for different types of water. Discuss links between places, showing the flow coming into and out of the school.
8. Record any questions you have about water as a class on a “Question Park” page.

Extension: Using a map of your local area, trace the journey water takes from the source of your school drinking water supply. Then trace where it is discharged after treatment or not. Your local Council (TDC or NCC) may be able to help with information. You may like to organise field trips to these places.

Evaluate/Reflect:

Was it easy to find water in the school?
Were some types of water more obvious and others more hidden?
How many different types of water did you find?
Where does water come from? Where does it go?
What do you think is happening to water before it gets to school, when it is in the school and when it leaves school?

