Enviroschools

Otago Enviroschools Newsletter 2014-2015











VIRTUAL GREAT WALKER COMP P12







Last year was a busy year for Otago Enviroschools.

We had four student hui, three teacher workshops as well as cluster meetings each term, waste minimisation performances and workshops for early childhood centres, many in-school projects funded by the Otago Enviroschools Action Fund, Silver and Green Gold reflections, a National Energiser Hui and more. The Dunedin Roots and Shoots group was formed through seed funding from Otago Enviroschools joining numerous Roots and Shoots groups, under the banner of the Jane Goodall Institute, around the world. Dunedin is the first to host a New Zealand group and in June a number of Enviroschools Secondary Students had the privilege of meeting Jane Goodall herself.

There has been a shuffle of principals in Dunedin schools and we look forward to working with those new to



Jane Goodall Tree Planting with Dunedin Roots and Shoots

Enviroschools. A huge welcome to Poolburn and Millers Flat Schools who joined the programme during 2014 and to Waitahuna and Wakari Schools who plan to join in 2015. We farewell Tiff Stewart from the Enviroschools team and look forward to staying in touch through the Kiwi Conservation Club that Tiff manages nationally. Congratulations to KJ Davies and her family on the early arrival of Oscar. KJ will be taking some time off from facilitating to enjoy being a family of four. We wish KJ all the best and look forward to having her return. Anna Hughes and Jennie Upton will be taking on the facilitation of Tiff and KJ's schools for now.

Steve Brown, our esteemed colleague in Central Otago, has accepted a new position as 'Schools Co-ordinator' which has Enviroschools under its umbrella. We wish him well in his new role. We welcome Anna Robinson to the team as the new Central Otago Enviroschools facilitator.

We hope you're all feeling as energised and excited about 2015 as we are. Enjoy reading about all the wonderful things Otago Enviroschools have being doing and what is on offer for 2015. Check out the 2015 Calendar of Events, mark the events in your school calendars and book in your teacher release for workshops and hui so as not to miss out. Enviroschools is the only provider of Professional Learning Development specific to Education for Sustainability.

Kā mihi nui ki a koutou. All the best for 2015. See you out there!

Jennie Upton and Anna Hughes

Otago Enviroschools Regional Coordinators















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HIGHLIGHTS

National Energiser Hui at St Peters Green Gold Enviroschool, Waikato

The National Energiser Hui was definitely a highlight for the Otago Enviroschools Team and the two Enviroschools Teachers who took up our offer of funding to attend the hui. Workshops included Action Competence, Holistic Reflection, Unpacking the Enviroschools Kit, Global Issues, sector specific workshops , Pecha Kucha and more. The Otago Enviroschools team got



together and decided global issues was worth delving deeper into. Our first Teacher Workshop will look at global issues – what they are, how they connect to what we do as Enviroschools and

how we can support schools in further addressing the issues on a local level. Check out the 2015 Calendar for the date.



Goldfields School in Cromwell has been engaging in whole school Enviroschool initiatives and in 2014 decided they were ready to reflect at Green Gold. The school unpacked the Green Gold reflective paragraph and collected evidence from within their physical environment, curriculum and community to affirm that they were in fact operating as a Green Gold Enviroschool. A confirmation day in November had Enviroschools regional coordinators and facilitators from both Otago and Southland, BOT members and local councillors in attendance. Students proudly showed us all they do both in and outside the classroom physically, through a powerpoint presentation and class presentations. The day finished with the raising of the Green Gold Enviroschools flag and presentation of the certificate. Congratulations Goldfields. Keep up the great work.

Goldfields Green Gold Reflection

Silver Reflection at Aspiring Beginnings, Wanaka

Aspiring Beginnings have been delivering Education for Sustainability to pre-schoolers in Wanaka for many years. Being part of the Enviroschools programme has helped them network with other centres across Central Otago as well as providing them with a framework to formally reflect upon their Education for Sustainability work to date. In term four last year, they formally reflected and decided that they were without doubt a Silver Enviroschool.

To help add to the strength of the Enviroschools network, three Enviroschool facilitators from Southland came along to be part of the reflection team. They are just starting Enviroschools in The Early Years in Southland and wanted to understand more of what it was to reflect in this sector. We began the day with a fabulous mihi whakatau, enjoying heaps of shared kai, much of it grown and all of it prepared and cooked in the centre. Their story spanning over ten years with mountains of evidence to back it all up, combined with seeing all the students living and breathing sustainable actions meant it was pretty easy to come to the decision that Aspiring Beginnings is Queenstown Lakes District's latest Silver Enviroschool.



Signing the Silver Certificate at Aspiring Beginnings

Aspiring Beginnings Silver Reflection

Port Chalmers School Silver Re-reflection

Port Chalmers School first became a Silver Enviroschool in 2005 so it was time to check in at Silver using the new self-reflection model to affirm their Silver status. The tour of the school and addition of many leaves to the silver tree reinforced the school's commitment. Congratulations Port Chalmers School.

Congratulations also to Clyde and Cromwell Primary Schools for affirming themselves Bronze Enviroschools.



Port Chalmers Silver Enviroschool



Senior Secondary Hui on **Quarantine Island**

This year we shifted our Quarantine Island Hui date to the Term 1 break, which meant we could have two full days with no time away from school. It worked well and we had a good number of committed, enthusiastic students. Guest speakers from Generation Zero taught students about power mapping which added strategy to the actions each school came up with for the year. Students brainstormed what was important to them, what they wanted to address in their school and how they were going to do it. Hard work was intermingled with some fun team building exercises and service to the Island in the form of releasing trees planted by past Enviroschools Senior Secondary students. We did some mahika kai, collecting tuaki (cockles) for a snack and had a real treat seeing Haunui – one of the voyaging waka – coming into the NZ Marine Studies Centre.

We look forward to seeing old and new faces at this year's hui – lots of fun and games in store! Check out the calendar and let your senior secondary students know to put it in their diaries.

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Haunui Waka

Tree Releasing

WANAKA Student Teacher Hui 2014 OUR PLACE

Forty students and ten teachers from nine Enviroschools across Central Otago gathered in Wanaka in late term three for their annual student teacher hui. The subject this year was 'Our Place'. Steve and Simon put together a fun and varied programme for the day and were helped out by DOC, Fish & Game and Forest and Bird.

Everyone got to explore their ideas about 'place.' Susie from DOC showed us how many locals volunteered their time to help conserve, protect and make our place more accessible to all. Fish & Game showed us what lives in our rivers and stream, and even did some electric fishing so we could see a beautiful Rainbow Trout that lives in Bullock Creek.

In the afternoon, we toured three activity stations around the foreshore of Lake Wanaka taking part in various activities from the Enviroschools kit compiled to help the students and teachers further explore the

place around them. By the end of the session there were some amazing pieces of ephemeral art scattered around the 'Our Place'.

PRIMARY HUI Foraging and Wildcrafting at **Araiteuru**

Utilising our local marae is important to us in building a relationship with tangata whenua and allowing students and staff to have positive experiences on the marae.

We were fortunate to have two mana tane support this hui. Kane Holmes, tangata whenua, shared his huge knowledge of traditional use of native plants. He was engaging and fun. Steve Parker, an apprentice medical herbalist, turned every day weeds into great medicinal poultices and had children enjoying the taste of wild onion! Enviroschools staff ran the Wildcraft cooperative herbal plant game, class sets of which are available for schools to borrow. Everyone had a great time learning about what our plants have to offer and more than one child felt like Bear Grylls by the end of the day.

YEARS 7-10 HUI Puaka/Matariki at **Puketeraki Marae**

As this hui coincided with Puaka/Matariki we decided to run it at Huirapa Runaka's Marae, Puketeraki in Karitane. Alex Whitaker and Kane Holmes ran sessions involving some traditional Māori New Year celebration activities – pūrākau traditional stories and making pūrerehua – traditional wind instrument that sounds like the pūrerehua / moth. In the afternoon we planted trees with Brendan Flack, on the beautiful Huriawa Peninsula, another activity celebrating new life in the New Year. Rakinui cried tears of joy and provided much needed dampness for the trees to take root in their new home.



Gates of Huriawa





Pūrākau with Kane Holmes

Getting inspiration for pūrerehua design.





Teacher Workshop: Sustainability and Education Outside the Classroom

The highlight of these workshops in both Dunedin and Central Otago were the stunning days of stillness and peace. Teachers experienced for themselves how refreshing and grounding time in and connection to the natural environment is. The workshops offered practical ways to get children outside of the classroom, connect them with nature and provide hands on learning in different subject areas. The key takeaway message was 'Time spent grounding and connecting

learning areas'. "Nature contact enhances children's learning and development."

children with the natural world has benefits for all

Martin, K. Dr. (2011). Putting Nature back into Nurture: The Benefits of Nature for Children.

This padlet has many documents and links to research on this subject:

padlet.com/annajoanhughes/sustaineotc

Seing the tree

Using all the senses



Otago Enviroschools Team Professional Learning Development



As a team we had a number of PLD opportunities in 2014. Highlights were the Appreciative Inquiry facilitation training with Free Spirit Training and Development and the Solar Schools Energy Education training with staff from the Nelson Environment Centre and Nelson Enviroschools. We are in the process of using the abundance of resources and activities to develop both primary and secondary Energy Education packages. Please get in touch if you would like to trial these in your school in the latter part of the year.

Jenny, Steve and KJ role playing in The Oil Game

Otago Enviroschools Action Fund Reports

Otago Enviroschools provided twenty \$500 Action Fund grants across Clutha, Central, Queenstown Lakes and Dunedin Enviroschools. Some fantastic projects got off the ground and were completed in the time frame allocated. Look out for Action Fund applications in 2015. Only 12 will be offered this year.



Clyde School

Clyde School began term one with a 'Towards Zero Waste' focus which empowered students to think carefully about the waste we create and ways we could help to reduce this.

As a result of the Action Fund money we have made significant steps in waste reduction. A Bokashi composting workshop was run for the Envirogroup and any interested members of our school community. Then we purchased Bokashi bins for every classroom and the Envirogroup manage this composting system. We have seen a huge reduction in food waste and there has been a positive change in students' attitudes towards food wastage. Several members of our Envirogroup shared our Bokashi composting system with the public, when they helped in the Enviroschools tent during Thyme Festival. The students felt proud sharing their learning and helping to educate the public and teach them about reducing food waste.



Educating the public on Bokashi







Alexandra Primary School

This year our school held its inaugural Matariki Celebration Day. Our Enviroschools team, the 'Alex Action Kids' investigated, planned and helped to implement a Matariki celebration. Our Matariki Celebration Day incorporated the last kai harvested from our school garden. Vegetable soup was cooked by our Enviroschools students and our sustainability-passionate teacher aide, Cathy.

With support from the Enviroschools Action Fund we held various workshops offering activities such as weaving, starmaking, Maori story-telling, waiata, haka, garden clean-up, planning the new year garden crop with Helen Hillis, of our local Alexandra Garden Club.

We held the Matariki Celebration Day on Friday 27 June - this was the day before the first new moon after the rising of the Matariki star formation, on June 28. Our Junior Syndicate was already learning about Matariki as a component of our term two inquiry unit, called Alex the Explorer. Students' knowledge was developed through learning about the first explorers to arrive in Aotearoa and their use of stars for navigation. We will also took part in a LEARNZ virtual field trip entitled 'He hokinga whakaaro'. This field trip focused largely on the experiences of early explorers and the encounters between early Maori and Europeans.





Awaiting Soup

Goldfields School, Cromwell

The children were privileged to be assisted by the volunteers from the local BNZ as they set off on their paper making journey with the Action Fund papermaking kits. Our willing helpers worked with the children tirelessly, adding shredded paper, mixing with hand blenders and placing it on the sieve frames. Every class was represented as they learned the techniques needed to reuse scrap paper to recreate usable recycled paper goods. Older students were teaching and supporting younger students to produce recycled paper products. Additionally, each syndicate had its own kit, plastic tubs and blenders to use following the workshop with the BNZ staff.

Paper waste was reduced. Class recycle bins contained less waste paper, this was being reused within the class either to make more paper, or for crafts. The children came up with a lot of ways to reuse paper – they became increasingly conscious of not reaching for a new piece and were content with using the reverse side of a used piece. This had not been the case prior to the papermaking focus. "Students will be fully involved in a technological design process, which includes a societal impact component. They will develop efficient paper making processes and design products using recycled paper."

Closed for Good benefits con



Recycling paper

Our paper recycling in the news

Aspiring Beginnings, Wanaka

With the action fund we received through the Enviroschools programme, we were able to purchase a compost tumbler and a set of recycling bins.



New recycling bins

Wanaka Preschool

Previously most of our recycling bins were not accessible to the children as they were around the back of the building. Sometimes it was difficult even for the teachers to access them. Our new indoor and outdoor labelled recycling bin system is accessible to all of our learners during the day, ensuring waste is separated correctly, encouraging thoughtful disposal of waste and provoking much discussion of what things are made of and where they will go to next. Emptying and sorting the recycling has become a daily routine the tamariki are keen to take ownership of.



Tumbler compost

Wanaka Preschool

We run an 'Explorers' programme each week taking a group of tamariki to Wanaka Station Park. This programme gives



Using our Explorers bags

tamariki opportunities to explore and discover and gain an understanding and appreciation of their natural environment.

In the winter months we provide them with wet weather clothing. This was previously getting put into plastic bags after the session to be taken home. With the fund you gave us it meant we could use the money to purchase reusable waterproof bags as an alternative. The tamariki understand the reason we prefer to use these bags and how it is better for the environment not to use plastic bags that get thrown away each week. We had the bags embroidered with our 'Wanaka Preschool' logo and a number from 1– 10. This number corresponds with the number on their waterproof jackets and over trousers we have given them for the term. They soon become familiar with which number and coloured bag is theirs and take pride in their 'Explorers' bag and clothing.

Wanaka Primary School

As part of the focus on waste the students undertook waste audits and discovered that a lot of food waste was making its way into our bins. We made the decision that food waste should be disposed of in a better way than to go to landfill. We looked at the alternatives and decided that a Hungry Bin worm farm was the way forward.

Initially the youngest children in Pod 1 helped to get the worm farm going by putting in the scraps from their morning fruit break. With Simon's help we did a lot of learning about worms too!

Some of the students in Year 5 are now learning about responsible food waste disposal with the aim that they will be taking responsibility for the collection of food scraps, feeding the worm farm and its ongoing maintenance. Next year the Envirogroup will be able to move the Hungry Bin around the school to help others learn about the importance of removing organic waste from landfill and how the worm castings provide much needed food for our school gardens. Through this action we are learning about sustainability as the enriched garden soil becomes better for growing edible delights! Thanks to the Action Fund we had enough money to buy some much needed garden tools, so now a whole class can go out and enjoy nurturing their gardens.

We are hoping the message will filter out to families and the community and encourage more responsible disposal of food waste and an understanding of how we can all live a more sustainable lifestyle.



Queenstown Primary Compost Model

Queenstown Primary School

At the beginning of 2014 Queenstown Primary School students decided our school compost system was not big enough to cope with the summer grass clippings and leaf litter. The students had completed a survey in 2013 with Enviroschools facilitator, Simon Williams and Podge Cochrane (our caretaker). They chose a suitable site for the compost bins and two bins were built.

A group of Year 5–8 students met in term two last year to plan a larger compost bin system. They were supported by Dave Dubnick our Technology teacher. They spent the term measuring, planning and experimenting with prototypes. Finally deciding on a five bin system that would use the slope on the school boundary to empty the top bin into the bin below, this would turn and aerate the compost.

The group presented this system to the school board and received funding from Enviroschools to build their design. The students spent term three and four making the bins, digging the site and putting it into place. In 2015 we will teach the rest of the school how it works and create a team of keen students to manage the compost. The gardening group are keen to use the end result.





Building the Compost Bins

Glenorchy School, Queenstown Lakes District



Kowhai seed raising tunnel house

In 2014 we were granted \$500 from Enviroschools to help develop our chicken coop area, with the aim of diverting any extra food scraps that could not be quickly and easily composted, away from the rubbish bin.

The purchase of a new chicken coop and the relocation of the old one to a new area will help to ensure that this initiative is a manageable and fully sustainable one in the future. All that is left now is for the children to design and build the new area, while the junior students are busy this term learning about chickens and incubating eggs for the newly designated area.

Along with this we have purchased a new tool shed and are in the process of putting up a new tunnel house and shade house to help raise the Kowhai seeds that have been collected from the local area. This initiative allows us to work alongside two local business Blanket Bay and Wildlife Safaris who have kindly donated resources, money and time to the school.

Dunedin North Intermediate

We spent the \$500 Enviroschools grant on two new bins for each classroom, and a Hungry Bin worm farm. Each class received a new paper bin and a new plastic bin. The worm farm is still getting established for everyone to use, so far this year it's only being used by the Food Technology class. Next year we hope to spread the food scrap collection to the staffroom, trial a few classes and the Envirogroup will carry out a waste audit to see what other improvements can be made.



Delight in our Hungry Bin

Macandrew Bay School, Dunedin



Measuring for piping

We purchased three black compost bins to add to the other compost bins we already had. The need for these bins arose in summer when wasps

invaded the other compost bins and the children did not like using them. We are hoping the lids on these will prevent wasps and allow the children to recycle any waste food.

The other part of our project was reinstalling our rainwater collection tank so we could water our school gardens.

A parent worked with several children to measure, buy necessary materials and then connect to the guttering on our school swimming pool. Lots of rain has meant the tank is full and we have used water from it to water our plants. It is great to have a water source again! Because the flow is not very good, one of our engineering fathers has recycled several old bikes to make a bike pump to help with water pressure. I am sure there will be many children keen to be watering the gardens when the bike pump is installed.

Water tank installed

Port Chalmers School, Dunedin

Port Chalmers School Enviroschools action fund proposal was to create an orchard of apples, plums and pears with varieties that are suited to the southern climate. We firstly asked Jason Ross from Habitate Nursery to advise us on the suitable varieties of fruit trees and on the most suitable position for the orchard. As we checked with the Dunedin City Council on land boundaries we were told that there was a possibility that the reclaimed land may have contaminated soil. This held up the planting of the trees as we needed to ensure the trees would not be affected. We have since decided to create raised beds with soil brought in to ensure the trees are healthy. In term one this year Room 2 will create the planting boxes and these will be ready for the fruit trees to be planted in winter.





Our raised beds

St Brigids School, Dunedin

At St Brigids we have spent the money re-invigorating our edible garden. Up until now responsibility for the garden has fallen to the senior room, but it was decided by our Enviro-council that each class should look after their own part of the garden. Each class was allocated \$75 which can be spent over term four

St Leonards School, Dunedin

Thank you for the grant it has enabled us to buy the framing to raise our garden beds. We are awaiting our topsoil so our Envirogroup can plant them out next year.



2014 and term one 2015. Each class planned what to grow. The plan is to grow food we can eat in our class, donate to needy families and sell to the wider community at assemblies. We are all looking forward to seeing our hard work coming to fruition.



been able to grow and use the produce

successfully maintain a Hungry Bin worm

farm from the grant. We have used this

for recycling the scraps from the Food

We have also been able to buy and

from the garden.

Technology rooms.

Working in the class garden

Taieri College, Dunedin

A massive thank you to Enviroschools for our grant. Thanks to the \$500 the Eco Warriors of Taieri College received we have been able to buy seeds and plants for our vegetable garden. These vegetables have been for the benefit of our Food Technology rooms as they have



Our vegie garden

Bayfield High School, Dunedin

It has been a productive year for the Bayfield Enviro-group. Our activities this year were greatly helped by the Dunedin Enviroschools organisation, who kindly worked with us, providing guidance and resources, including a monetary grant.

One way that we utilised this Enviroschools grant was in purchasing multiple new recycling bins. We have plans to develop our recycling system further next year. Seeds and seed raising mix were also bought which we have grown, sold to staff and planted in the school's greenhouse.

The primary purchase made with this grant was a new Hungry Bin to help us

expand our thriving composting system. This has allowed us to make the most out of the food scraps that we have been able to collect from the staff and common rooms. We also hope that this additional bin will help us expand our system into even more classrooms next year - watch this space!



Enviroprefects with the Hungry Bin

Opportunities and events to add to your school calendars in 2015!

- Clutha District Teacher Workshop Wednesday, 13 May 9:30–2:30. Enviroschools Energised and Global Issues. This is the first teacher workshop held in the Clutha District so be sure to secure your spot.
- Otago Farmers Market Stall Saturday, 16 May. Book your space with us now, only three spaces available.
- Senior Secondary School Hui on Quarantine Island Monday, 13 April – Tuesday, 14 April. Let the seniors in your secondary school know these dates.
- Dunedin Primary Student Hui Maori Perspectives June 2015

Virtual Great Walker competition



The Virtual Great Walker competition is running in Term one 2015. It starts on 26 January and goes through to 2 April. You will need to form a group of at least five kids from school, kura, home school group or kids club.

Teachers, kura māhita, home school parents, club leaders – get your kids ready for an incredible adventure. The Virtual Great

Roots and Shoots Otepoti

Aim Global, Start Local!

The Jane Goodall Roots & Shoots programme is about making positive change happen for our community, for animals and for the

environment. With tens of thousands of young people in over 130 countries, the Roots & Shoots network branches out across the globe, connecting youth ambassadors of all ages who share a common desire to help make our world a better place.

Get involved to share ideas and inspiration, implement successful environmental action projects with local community groups, and participate in special events and global campaigns.

Roots and Shoots Otepoti is supported by $\ensuremath{\mathsf{Enviroschools}}$ Otago.

For information on how you can be involved, contact: Coordinator **Aviva Stein 0273646154 rootsandshoots.otepoti@gmail.com**

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- Year 7–10 Student Hui at Tirohanga Leadership and Action – 17 September 9–3pm
- NZ Marine Studies Centre have one more year of funding to support your school in connecting with your local environment, becoming Kaitiaki tangata through taking action for your environment based on research you produce, collaborate with local scientists and develop science capabilities in your students. Contact Sally Carson to secure support for your school. sally.carson@otago.ac.nz
- Stay tuned for Queenstown Lakes/Central Otago workshop and hui dates for term one and two.

Walker competition is running in Term 1, 2015 and your group or class could win an ultimate Great Walks experience!

Along the way your kids will:

- Learn about conservation by virtually visiting the Great Walks
- Get out and walk to discover your own back yard
- Have access to some activities
- Have the opportunity to participate in a virtual LEARNZ field trip and bring the Great Walks in to the class room

Getting involved is easy! All you need to do is get out and walk and then show us what you've learnt along the way.

doc.govt.nz/virtualgreatwalker

The South-East Marine Protection Forum

The South–East Marine Protection Forum has been established by the government to find out your long–term vision for our coast. This is your chance to have early input into the Marine Protection Areas process on the coast (Timaru to Waipapa Point). Tell us



what is important to you in our marine environment so that the Forum can make recommendations that are based on the best information from as many people as possible.

south-eastmarine.org.nz

Facebook

Join the Otakou | Otago Enviroschools Facebook group.

Share your ideas, questions and things of interest with the Enviroschools community. **facebook.com/groups/EnviroschoolsOtago/**

