Southland/Murihiku

Enviroschools Newsletter 2015

NEW ENVIROSCHOOLS

SCHOOL REPORTS

SCHOOL EXCHANGES
Hello Southland Enviroschools teachers. What a busy year - so many things happening around the region. It has been such a buzz to see you all at our events: two teacher workshops, a secondary school hui and a regional hui, not to mention three silver reflections and a green gold. It is fabulous to see so many projects and events happening.

Many schools and kindergartens have had a focus on waste management, with emphasis on recycling and worm farming. There have been plenty of garden projects, planting and maintaining trees and Waikiwi Kindergarten has been working on water capture and use.

I hope you enjoy this newsletter, and if you see a project by another school or are interested in what some of the other schools are doing, contact me or your facilitator and we will put you in touch with the right person. Have a great summer break we look forward to seeing you all in the new year.

Amy Kirk
Southland Regional Enviroschools Coordinator

Three schools and one kindergarten joined the network this year, bringing the total to 26 schools and five kindergartens. Welcome to Hedgehope, St Patrick’s Nightcaps, Heddon Bush Schools and Myross Road Kindergarten! I know these Enviroschools will bring new energy and enthusiasm to the network.
Congratulations to Fiordland College and Lees Street and Waverley Kindergartens for completed silver reflections, it’s a great achievement.

Reflections are an important part of the Enviroschools programme and I encourage all Enviroschools to take time to reflect on the year that has been, what happened, what didn’t happen, the lessons you learnt, your plans and visions for the year ahead.

Please let your facilitator know if you are planning to reflect on bronze, silver or green gold next year.
For two days during February, 15 young environmental leaders participated in a wananga which introduced them to concepts of whakapapa, kaitiakitanga, mauri and manākitanga at Te Koawa Turoa o Takitimu. The programme was the first of its kind for these students and was supported by a local team which included Ōraka Aparima Rūnanga, Ngāi Tahu whanau, Enviroschools Foundation, Environment Southland environmental education team, Department of Conservation and resource teachers of Māori.

The students were selected as representatives of the three Southland secondary Enviroschools.

Following mihi whakatau we tuned in to the mahi by sharing a small taonga we had each brought with us, placing them on a large map sharing the story, people and place it connected us to.

Later in the afternoon we shared korero with Victor from the Ministry of Education and Dave from DOC about Te Ao Māori, Te Koawa Turoa, whakapapa, kaitiakitanga, mauri and manākitanga. Following this we went on a hikoi up the valley, sharing more korero and thinking about what score we would give this area to represent its mauri. This was a challenging exercise which was used to encourage some critical thinking about different environments, the impacts they face and the roles we can all play to nurture them.

In the evening the students discovered more about whakapapa with Lydia from Ōraka Aparima Rūnanga, who provided a great take-home resource for them as well.

On the morning of the second day we all ventured back up the valley where our mahi was to build a seat that overlooked the second pond and the Takitimu mountains. Everyone played a part in choosing the site and building and decorating the seat. There was a lot of fun and sharing together as gabion baskets were built, sleepers were carried in, rocks were gathered, harakeke flowers were made, gorse was cleared, cairns were built and the seat was levelled and tested by all 15 students having to fit on it at one time! Each school had also brought some ti kauka as koha so these were planted in the area behind the seat.

During this time we discussed the importance of naming the seat. The students suggested the name should include the fact that the seat was built by young people as a place for young and old to sit and reflect (pondering), as well as observing the reflection of Takitimu in the pond. The name will be left for the rūnanga to further develop in Te Reo.

This was a wonderful wananga for all who attended and helped in so many ways and the partnerships and cooperation made the learning all the more real for us all.
Regional hui

On 29 October, Environment Southland hosted the 2015 Southland Enviroschools Hui in Gore. Students, teachers and parent helpers from 20 Enviroschools joined us for a day of fun, inspiration, learning and networking. It was a great day and we are so pleased that so many of you could come - it really is a special event.

The theme of the event was “how to” with children learning a variety of practical environmental skills.

We listened to inspiring presentations from Gore Enviroschools and members of the Youth Council about how they are making a difference in their environment.

We were then into the many activities on offer: learning how to graft heritage apple trees and make seed balls with Robert and Robyn Guyton; making environmental superhero dolls out of recycled materials with community artist, Janet de Wagt; making plant pots from recycled plastic bottles with Jen Lowther from Wastenet; and learning how to collect a water sample from the Mataura River with staff from Environment Southland.

In the afternoon there were opportunities to explore historical landmarks in Gore and share an environmental tip on Hokonui radio during the Great Gore Selfie Tour.

And finally, the children traded items they had grown or made, during the Environmental Trading Game.

Teacher workshops

Energy workshop

On 21 May, 14 teachers from 10 Enviroschools participated in a workshop focusing on energy and sustainability.

The day started with an opportunity for teachers to share examples of how they had previously included a focus on energy in their teaching. Some brought samples of learners’ work and resources to show.

Dyson Gentle from PowerNet gave an interesting presentation on energy in Southland, covering electricity distribution and increases in demand, the importance of safety around electricity and renewable energy.

Invercargill City Council eco design advisor Keiron O’Connell talked to us about energy efficiency. We then walked to a nearby house, where Keiron did an energy efficiency assessment and we discussed practical, affordable ways to warm the house more efficiently, reduce heat loss, improve ventilation and reduce moisture.

After lunch we learned about simple practical things children can do to monitor energy use and save energy at school. Teachers received a handout listing some of the resources that are available for teaching and learning about energy. It was a great and very informative day.

Rocky shore field trip and workshop - Catlins visit

On 16 September, 11 teachers from seven Enviroschools participated in a field trip to the Catlins. The aims of the field trip were to provide teachers with information and practical experiences relating to the coastal environment, and to give teachers an opportunity to interact with scientists and conservationists.

We met at Waipapa Point where Sally Carson from the NZ Marine Studies Centre in Dunedin showed us how to do a rocky shore study using the marine metre squared method. We enjoyed discovering the fascinating plants and animals on the rocks and in the rock pools. After the rocky shore study, Mark Oster gave us a very special guided tour inside the lighthouse where we learnt about the history and design of the lighthouse. Next we travelled to Tokonui School where Sally helped us upload our data from the rocky shore study onto the MM² website. Tokonui students gave us a presentation about their Enviroschools initiatives, including their exciting ideas for their project “Over the Fence”. After a delicious lunch provided by the school’s Home and School Committee, the students led us on a guided tour of their spacious and beautiful school grounds. James Dare from Environment Southland gave us a very interesting presentation about whitebait and we learned about these interesting native fish, their lifecycles, habitat, threats and actions we can take to help them. At the end of the day, Shay van der Hurk from DOC and his colleagues Cheryl Pullar and Keri Tuna led us on a field trip to the Titiroa Stream where we looked at the tide gates, tested the salinity of the water and learned how to identify good spawning habitat for whitebait.
On 26 June, the Enviro Group from Longford Intermediate School visited Pukerau School.

The day started with a visit to Pukerau Nurseries, where the Longford Enviro Group learned which species would grow best in their school's grounds. This will help them to plan the next stage of their “Learning Pathway” project. The nurseryman then showed them how to propagate their own plants from cuttings and seeds. Longford are thinking about starting their own native plant nursery.

Longford were welcomed to Pukerau School with a lavish morning tea. The Pukerau NET-group then gave a presentation on the work they’ve been doing since 2011 to help restore the Red Tussock Scenic Reserve and their extensive range of enviro projects at the school.

The Pukerau students led the Longford students and teachers on a tour of the school (inside and outside) to see their various projects. There was a lot of discussion and sharing of ideas. The students enjoyed a boisterous game together and then had lunch.

At the end of the day, the Longford Enviro Group thanked the Pukerau NET-group for hosting them and gave them a kowhai tree to plant at school. Longford’s Enviro Group would like to invite Pukerau’s NET-group to visit them at some stage in the future.

The Rimu Enviroschool Group visited Longford Intermediate in Gore late in term three. This was an opportunity for the Rimu group to see an Enviroschool in action and ask the Enviroschool leaders how their programme was organised, what their vision was and the differences being an Enviroschool had made to their school.

The Rimu Enviro Group had guided tours of the school and explored the various projects which had been undertaken such as; the development of the Enviroschool vision, the birdfeeders, composting, fruit trees, skate board ramp, and the very impressive ‘learning pathway’ based on the legend of Matamata who once lived in the Hokonui Hills.

This was a valuable visit for Rimu School and the children came away with some excellent ideas for future projects for their Enviro Group.

Regional capacity funding

Big thanks to the Enviroschools national team for enabling us to help our regional network achieve things over and above what they would normally be able to. We have been able to offer exchange funds which enable Enviro Groups to visit one another to get ideas for their programmes and projects. We were also able to offer scholarships for three teachers to attend the New Zealand Association of Environmental Education conference in Auckland. Recipients are; Alessandra Menegatti, Lynley King and Vaughn Filmer.

There is funding for two more exchanges before 30 June 2016. If you are interested contact your facilitator.
Lees Street Kindergarten

Earlier this year Lees Street Kindergarten completed the reflection process for achieving their Silver Award. The kindergarten is continuing to build on their enviro practises.

The most recent initiative has been a tree planting project, in conjunction with Environment Southland, on the banks of a popular city walkway. Children, teachers and parents got together to plant about 40 native trees in an area that has been put aside for this kind of project. Lees Street is the first kindergarten to take part in this type of initiative. Children are regularly visiting the site to stomp on the weeds and monitor the plants’ growth.

St Teresa’s Bluff

St Teresa’s Bluff had a busy Labour weekend. On Sunday 25 October, six months to the day of the devastating Nepal earthquake, the staff and students of St Teresa’s came together to organise a huge charity concert where all the profits went to Caritas.

The students sang two songs, Bruno Mars’ Count on Me and Michael Jackson’s We are the World, at the opening ceremony, read a speech and welcomed the crowd to the concert.

The kids had a great day at the concert. They really showed their school values of charity and compassion in the way they went out of their way to try to help the victims of the earthquake.

Rimu Primary School

Rimu Primary School Enviroschools Group

This year at Rimu we have been looking at how we look after our environment. We took a closer look at the rubbish in our school and the amount of rubbish that could have been recycled was shocking. So we decided to come up with a better system to reduce, reuse or recycle our waste at school.

Each class now has three small buckets for different waste - red for rubbish, yellow for paper and cardboard, and green for food scraps that goes in our new compost bin. Some people even take their lunch rubbish home to reduce or recycle too.

At Rimu School we now have a brand new cardboard recycling crate. This is for our cardboard waste to get collected and recycled so that doesn’t end up in landfill.

At our school pet day we made and sold bird feeders. We used peanut butter, bird seeds, pine cones and string to make them. We sold out, which was great!

Food scrap are turned into compost in Rimu School’s compost bin.

Students from St Teresa’s School held a concert to raise funds for the victims of the Nepal earthquake.
**Southland Girls’ High**

*Environment Committee and Environmental Education*

The 2015 Environment Committee have painted rubbish bins in school, with the vision that with a more brightly painted, ‘in your face colour’ bin students can’t fail to see where to put the rubbish. With a roll of nearly 1200 students, the rubbish problem always needs solutions.

Again the committee supported World Environment Day on 5 June with a variety of activities, like a power-free hour around the school.

Supporting the Enviroschools values, we run environment science as an option for year 9 and 10 students and 2014 saw a record number of nearly 100 students getting involved in issues of climate change, conservation and sustainability.

Highlights for the year are always the field trips connecting the learning in the classroom with local places and community groups. For example; counting many mud snails and working out the difference between clams and cockles on a MM² trip (New River Estuary), connecting with the Bluff Hill Enviro Trust and helping them empty traps.

In November this year, year 9 and 10 environment students undertook the second year of monitoring and measurement at our very own SGHS native plant monitoring plot / project out at Bushy Point, Otatara. Here we have found that plants like cabbage trees have grown more than 30cm in a year. This project is supported by the Otatara Landcare Group and will provide valuable data on the regeneration growth rates of native bush in years to come.

2016 again looks busy, with many students wanting to be involved in environmental education at SGHS.

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**Fiordland College**

The big achievement for Fiordland College in 2015 was completing a silver reflection. This was a reflection of the huge effort put in by students, staff and the wider community toward achieving our vision to become a Centre of Environmental Excellence.

Our year started with the Enviroschools leaders’ hui at Oraka Aparima Runaka Te Koawa Turoa o Takitimu.

Our entire year 7 and 8 classes worked on an Enterprise project to develop ‘house’ gardens. We have four planter boxes painted in house colours and featuring the school values of effort, respect, integrity and curiosity.

The year 9 students were the first to complete a new social studies topic on resource use and sustainability focusing on energy. This included a field trip to the Whitehill wind farm, an energy audit and a school wide campaign to ‘switch it off’.

Year 7 and 8 students continued the native tree planting at Ivon Wilson Park.

We have almost completed a mountain bike track on the boundary of the school field. This is built by students for the students.

A handful of students created a rock wall featuring rocks painted by students with Maori themes and school values. This has rubber matting in house colours with the school values to enable bouldering.

We have created a Wednesday action group made up of eight year 7 students. These guys take on environmental projects throughout the school and so far they have created GOOS booklets from used paper, started developing plant identification signs for native trees in the school grounds including a treasure hunt and completed the school gardens.

We continue to grow Kids Restore the Kepler, including pest control and monitoring, as well as sharing the project with other students and this year received a Green Ribbon Award for community conservation awarded to our head student at Parliament.
Hedgehope School

Late last year, we had a problem with the younger children at our school eating the vegetables in the school garden without asking.

To solve this problem, we constructed a long garden with separate plots for each Room Two child. The vegetables planted were ones that could handle cold climates because in Southland many popular plants can’t grow unless they are in a glasshouse.

The junior students buddied up with a senior student who helped them to plant out their gardens. The garden plots contained combinations of peas, carrots, radishes, turnips, and sunflowers.

The little kids were able to eat their vegetables whenever they wanted to. If they weren’t ripe, the younger children soon learnt that eating unripe veges wasn’t very nice! Now we all know more about the harvesting of vegetables.

Halfmoon Bay

After all of the eeling we have been doing during STARFISH we thought it would be interesting and important to look closely at Mill Creek and how we can help to preserve the area. We also wanted to find out exactly what lives at the creek and how we can protect their habitat.

At the beginning of the week we all walked to Mill Creek where we met Jen from DOC. Jen had set a minnow trap the night before and had lots of creatures from the creek in clear containers or fish tubs for us to examine. We had long fin eel, red cockabullies, snails and even a tiny flounder. We talked about how we can keep these creatures safe and what they need to survive.

Jen then told us about the kingfisher nests that are all along the creek. We tried looking for a kingfisher but unfortunately we couldn’t find one.

On Wednesday we revisited Mill Creek but this time we looked at the creek from a different point of view. We went on the water in the dinghies at high tide, this was awesome! We saw whitebait and learnt about why they come from the sea into fresh water.

We also went onto the beach and looked at the pingao and the restoration work that a previous Halfmoon Bay School group had done. Phred from DOC told us a Maori legend about the pingao or Tane Mahuta’s eyebrows and why the estuary is such an important habitat.

Back at school we did a range of activities to back up our new learning. Thanks to DOC for all of your help.

“Sandhills can grow for months, for years, for decades, for centuries, for tens of thousands of years, for hundreds of thousands of years, for ever!” – Iain

“When freshwater meets salt water it’s called an estuary.” – Travis

“Sand dunes are made out of sticks and sand that pile up on top of each other.” – Summer

“To build the kingfisher’s nest it flies full speed into the bank. It repeats this until it has a hole big enough to stand in. Then it shovels out the rest, making a tunnel upwards and then it makes a chamber for its eggs.” – Tommy

“Pingao lets the sand dunes move.” – Zoe

Halfmoon Bay students at the pingao dune restoration site.
Waikiwi Kindergarten

Another busy year has passed for Waikiwi Kindergarten. We have just celebrated our first year as an Enviroschool. Since beginning our journey we have put in place several processes which have now become part of our culture.

We set up our very own kindergarten worm farm and compost bin which has seen us looking more at beautifying our outside environment and ways which we can do this more sustainably. The children have been empowered to think more about being water wise through the use of a large barrel for collecting water run-off from the roof which is used for play in the sand pit as well as watering our vegetable and flower gardens.

We are avid recyclers and have introduced separate bins for sorting rubbish and recycling, as well as food for chickens, worms or to add to the compost. We have even had to hire a second yellow recycling bin!

We love to find ways to reuse old products and have just recently had a member of the kindergarten wider whanau build a super mud kitchen for the children out of old pallets. We will add more recycled materials to complete this project. The understanding of the importance of recycling was reinforced for the children through a trip to the recycling centre and dump stations.

Many of these projects which we have been working on at kindergarten have involved whanau and community. We have participated in community tidy-ups, collecting rubbish and sweeping up neighbours paths. We have had parents coming in to find out more about what they can do at home because their children are sharing their knowledge about the importance of caring for their environment. This has resulted in sandwich wraps being ordered and used a lot in lunchboxes. Our kindergarten has become much more waste conscious.

Most of all we are well on the way to meeting our vision of our children having a greater knowledge of how to look after and respect their environment.

Gore Main School

The Gore Main School students have had a busy year keeping all existing projects running. Our worm farm is going well and doing a great job turning fruit and veggie scraps into precious worm juice and castings for our school gardens.

Paper 4 Trees, our paper recycling programme, is continuing to be effective at Gore Main. We recently were awarded five trees for our 2015 recycling efforts, which look great in our garden.

The school tunnel house has been growing plant seedlings for our school gardens. Over 2015 we tried to grow poppies for the first time. This was to celebrate 100 years of ANZAC. This poppy initiative has been very successful and we have beautiful poppies flowering.

Our ongoing project, the school ‘Tranquillity Garden’, has run into a few difficulties this year due to a bog appearing in the garden because of extreme rainfall and drainage issues. We have been working hard to alleviate these issues, and are still working on our ‘Tranquillity Garden’.

We want to continue beautifying our school and encouraging as many students as we can to learn about what we are doing.

Te Anau Primary

Te Anau School Enviro Group have been looking at waste after doing a waste audit with Mark. We now have worm buckets in all rooms so that suitable food goes into the worm farm daily.

We have also been busy with Kids Restore the Kepler throughout the year. All classes have contributed towards the vegetable gardens which the Enviro Group help to maintain.
Longford Intermediate School

As a group of the Enviro Club members were digging and breaking up the soil for the new veggie gardens we started to chat about how much we’d achieved this year. Some of us didn’t think we’d done a lot until we started to list what we’d done.

Here’s a quick summary:

In May the whole Enviro Group, along with parents and a few staff, visited the disAbilities Resource Centre in Invercargill and experienced the fantastic World of Waste Tour.

We visited Demolition World to look at their recycled and upcycled materials.

In early June Jennifer from WasteNet and Pat from Enviroschools came to school to help us conduct a whole school waste audit. What a smelly job!

Following the waste audit, the Enviro Group members put into place a trial whole school composting system, which they presented at the school assembly and then visited the classrooms and taught the classes what to do.

What else did we do?

• Made and sold the best ever burgers as a group fundraiser
• Sold raffle tickets as another fundraiser
• Bought four raised veggie garden kits and built them
• August was a busy month. We attended the Southland Environment Awards. Students and staff had a very enjoyable evening finding out about all the wonderful environmental projects that are happening around Southland. We were so surprised and excited to receive a huge gift of shrubs and trees to plant. Most are planted now and we decided to start a cabbage tree forest too! We hosted Rimu Primary School’s Enviro Group and showed them our progress.
• We also visited Pukerau School to meet their awesome Enviro team and learn about their involvement in the conservation of the Red Tussock Reserve. Then we visited Pukerau Nurseries and Arne Clelland taught us how to take cuttings and propagate them.
• Dug up our heritage potatoes and saved some for seed potatoes
• Made hot purple chips with our Moeraki Whaler potatoes (really tasty)
• Fundraised and bought a tunnel house
• Grew and sold daffodils

In October we had a follow up waste audit with Jennifer and were pleased to see we had improved with the recycling of our waste, but still had room to improve.

And there are heaps more little projects like planting seedlings, peas, potatoes, pumpkins, taking our own cuttings and weeding the school gardens...the list goes on.

Phew! And some of us we thought we’d only done a few things this year, and we’ve still got term four to go!

We’re proud of our achievements and have a strong cohort of year 7 students going through to year 8 next year. So 2016 should be as equally action packed.

Waverley Kindergarten

We are busy at the moment at kindy with planning our gardens for the summer.

We had a working bee to construct our new sensory garden around the back of the kindy, which we are hoping will bring lots of bugs into our environment. We also planned out the tunnel house.

We are also currently looking at Tawhirimatea, the wind guardian and how he can aid us to make things fly, eg kites, planes, helicopters.
How can we help?

The environmental education team at Environment Southland can help your school with environmental topics. We can offer:

**Teacher resource packs** – estuary, groundwater, wetlands and pest animals. Resource packs include information, ideas for inquiries and activities to do with your class.

**Stream Connections programme** – information, classroom activities and stream study field trips.

**EnviroScape model** – a great tool for understanding how water moves through a catchment and the effects of land use activities on the receiving environment.

**Coastal Studies** – information, activities and support with field trips.

The team look forward to hearing from you in the new year.

*Telephone 0800 76 88 45 or email education@es.govt.nz*

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**What is coming up in 2016?**

- NZAEE conference 9-12 February in Auckland
- Teachers’ workshop in March
- Keep your eyes and ears open for the next secondary schools event.

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**Amy Kirk** – Enviroschools Regional Coordinator

**Pat Hoffmann** – Environmental Education Officer & Enviroschools facilitator

**Mark Oster** – Environmental Education Officer & Enviroschools facilitator

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Environment Southland regionally coordinates and facilitates the Enviroschools programme with financial assistance from Southland District Council, Invercargill City Council and Gore District Council and support from the Toimata Foundation, who fund the Enviroschools programme nationally. Southland Kindergarten Association provides facilitation for the kindergartens in the programme.