Hello Southland Enviroschools teachers – WOW it has been a busy year for everyone! We have had four new schools join the network, four Envirogroup exchanges, four reflections, a BIG hui in Te Anau, two teacher workshops and two cluster workshops. This newsletter has snippets from all the regional events, reports on action and exchange funds, highlights contributed by schools and what’s coming up in 2015.

You should have all received a census form from the national team – thank you to those who completed and returned it. The information from it will assist the national Enviroschools team with how they can best support the programme and help to ensure the continuation of funding for the Enviroschools programme.

Amy Kirk
Southland Regional Enviroschools Coordinator

Nau Mai Haere Mai - welcome to our new Enviroschools

Welcome to our new Enviroschools – Rimu and Tokanui Schools, and Waikiwi and Newfield Kindergartens. This brings the total to 23 schools and four kindergartens. We know each of you will bring great energy and enthusiasm and make wonderful additions to the network.
Congratulations to the schools that completed a bronze or silver reflection, it’s a great achievement. Reflections are an important part of the Enviroschools programme, and we encourage all Enviroschools to take time to reflect on the year that has been, what happened, what didn’t happen, what lessons you learnt and 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.
A big thank you to Te Anau Primary School and Fiordland College for hosting the Southland Regional Hui. It was wonderful to have students leading the day. Thank you also to the schools that attended – it was a great day with plenty to see and do. We heard from the ‘Kids Restore The Kepler’ leadership group about what they get up to and enjoyed a tour around the Te Anau Wildlife Centre before heading off to the Kepler Track for group activities. These involved tracking movements of animals in the forest and walking along the track to the big old beech tree. There was an activity demonstrating how radio telemetry equipment is used to find kiwi and we met some old local geckos. After lunch, those schools that could stay traded things they had made or grown.

If you would like to know more about any of the activities at the hui please contact your facilitator.

The secondary schools’ workshop was a great success, with 15 students from Aurora College, Fiordland College and Southland Girls’ High School attending. The focus of the workshop was “The Infinite Game” developed by Niki Harré from Auckland University, a medium through which the young environmental leaders developed their environmental values. Next year this workshop will be extended to two days, where students will develop these concepts further and take action.
Water in the landscape workshop

This workshop began with a discussion with our scientists on water in the landscape and how land use affects water quality. Then we had the big unveiling of the EnviroScape model, which was an ideal way for everybody to see how a catchment works. The whole range of resources that are available from Environment Southland were showcased, from Stream Connections field trips to back issues of the Enviroteach. There was also a field trip to the wastewater treatment plant, which was very informative.

Cluster workshops

In April we had two cluster workshops; one on pest animals and how to monitor and trap them, the other looked at what you can achieve in small urban gardens. Not only did the participants learn new information and skills, there were opportunities to get together and share ideas.

Marine monitoring workshop

The focus of this workshop for Enviroschools teachers was coastal ecosystems. We began with information from our scientists about what is happening in Southland’s coastal environment. We looked at how citizen science can help communities and scientists know more about the coastal environment using the Otago University’s Marine Metre Squared survey. This survey is specifically designed with schools and families in mind.

Sally Carson from the University of Otago took us on a field trip to Omaui to demonstrate how it’s done. The data from the survey was then uploaded to the Marine Metre Squared website and the findings were discussed. It is amazing what you find when you start looking closely.

More information will be included in the 2015 term one edition of the Enviroteach magazine.
Thank you so much for organising our visit to Goldfields Primary School in Cromwell. We wanted to see the Maori perspective in an Enviroschool and enjoyed our visit very much indeed. We were welcomed by a powhiri which was a new experience for most of us. Our girls had to walk in first with the boys behind, then the principal, Mrs Booth welcomed us in Maori and told us her pepeha. Wilf replied in English for us and put the plant we had brought as koha down for Mrs Booth to pick up. Then the Goldfields kapa haka group performed for us and sang beautifully – we felt special at having such a welcome.

We looked around the school with the Envirogroup and saw their many projects – a native garden, worm farm and compost system, gardens for veges and upturned baths for seating, pathway tiles and the beginning of an orchard. The school grounds were big, with a beautiful mural showing their whanau group birds. The juniors want a bee garden so they were planning that and the whole school was learning about sustainability. Some classes were making paper, others were studying recycling, the rubbish dump and worms.

Mrs Booth then gave a te reo lesson to room 11 who were hosting us and it was interesting to hear the children’s pepeha and the legend about Kopuwai, a dog-headed giant who lived in the Central Otago region.

This was a valuable experience for us and it was good to see a year 1-6 school that was so much bigger than us. Our whole school was about the size of one of their classes!

Regional capacity funding

A big thank you to the Enviroschools national team for providing the funding to enable us to help our regional network. Several schools have achieved things they would not normally have been able to, through the use of both action and exchange funds. Action funds of up to $500 let schools start or finish a project, while exchange funds allowed Enviroschools to visit with each other to share ideas for their programmes and projects.

We were also able to offer scholarships for teachers to attend the New Zealand Association for Environmental Education Conference in Christchurch and the Enviroschools Energizer Hui in Cambridge.

Here are some of the reports that we received from the schools about how they used their action and exchange funding.
Longford students admire the vege gardens at Te Anau School.

Longford visited Te Anau

The Longford Enviroclub

In June, Mrs Mitcheson and Mrs Ritson travelled to Te Anau with eight students from the envirogroup. There we visited the local primary school to swap ideas and look at the projects they were involved in. We were warmly welcomed with a haka and waiata and shown around the school grounds. We marveled at the willow hut they were weaving and the butterfly and vege gardens. With Environment Southland educator Mark Oster, we were taken to the start of the Kepler Track to be shown the pest traps Te Anau Primary School monitors. The humane traps catch weasels, stoats, ferrets and cats that kill the native birds. We thought this was a pretty impressive commitment to protecting New Zealand’s wildlife. Te Anau Primary School treated us to lunch and our students forged some good friendships in the short time we were there. Coming home, we reflected on what we saw and now heads are buzzing with plans for our school environment.

Gore Main visited St Patrick’s in Invercargill

The Gore Main School Envirogroup

The goal of the Gore Main School Envirogroup during 2014 was to begin a ‘tranquillity garden’. A school survey showed that children would enjoy a space at playtime where they can read, reflect or relax with friends. We chose an area beside our orchard to begin the space. It required a lot of planning and work, like fencing. We visited St Patrick’s in Invercargill to get ideas from their ‘prayer garden’. We have begun smaller initiatives within the school that will eventually be incorporated into our ‘tranquillity garden’. We have not yet completed this space but look forward to seeing how it develops in the future.
Students at St Teresa’s School in Bluff prepare the area for the prayer garden.

**St Teresa’s School, Bluff**

Thank you so much for our donation for help to finally create our prayer garden at St Teresa’s School. We are working with a local builder who is.boxing up our pathway to cement it and fill it with rocks we gathered as part of our Geology of Bluff science project from a couple of years ago. Once this is completed we will begin to plant the native trees in a circle around the pathway. We have also been donated four heritage apple trees which will go in the spaces between the cross. Benches will be put under the apple trees so we will eventually be able to sit and eat fruit straight off the trees. We hope to have the project completed by the end of the year.

**Waverley Kindergarten**

Thank you for our action fund. We have used it to get our kindy garden up and running. We started with creating a vision map with the children’s ideas for making our environment a better place for living things and are now taking action. With the money from the action fund we have bought some new tools such as a wheelbarrow, put in a berry garden, started some compost bins, bought some heritage fruit trees and are in the process of creating a new rain tank to create easier access to water near our green house. It has helped us to make the children’s ideas become reality.

**Waianiwa School**

We have had our vegetable garden plots for a few years but we lacked the tools to be able to have a class working out there together. With this funding we were able to buy a garden fork, spade, trowels, children’s wheelbarrows and gardening gloves to help us work in the garden. To continue the vegetable garden we bought two metres of compost to give the gardens a boost in fertiliser and some bags of seed raising mix to plant our new seeds in. All classes now enjoy working in the garden and we can’t wait to produce some delicious vegetables! We have cut some little tree branches and we wheeled the scraps into the big compost. We have a new worm farm and we used the tools to move the tiger worms.
**Garston School**

Thank you for donating money for the greenhouse – we really appreciate it. We have spent it on buying four new panels for the greenhouse because they blew off in the autumn gales and we have had extra screws put into each panel so that won’t happen again! We planned different ways of using the interior garden space and have decided to buy no-dig garden planters and put them in the middle of the greenhouse with a bark chip pathway all around the garden. This will let lots of children in at the same time and didn’t reduce the growing area by too much. We have also purchased a shelving system for pots for when we take cuttings and grow our own seedlings. We have bought organic compost which was important to us as it has no chemicals added and will buy plants very soon for the growing season.

We researched the plants we need for a bee garden which will go around the outside of the greenhouse and the juniors have decided what vegetable plants to go inside – peas, tomatoes, beans and melons for example. We are still waiting for the garden planters to arrive before setting up the garden inside the greenhouse, and are waiting for the frosts to finish before planting outside.

We still have lots to do and thank you again for giving us funds to get this far.

**Gore Main School**

Our action fund went towards fencing to enclose the tranquility garden for safety and ambiance. The children raised the other $500 needed to purchase fencing materials. Unfortunately the project has come to a standstill due to the Ministry of Education looking at Gore Main School’s property and current fencing. The Envirogroup have been undertaking other projects to keep the momentum going with their ‘tranquility garden’, such as garden art, edging for trees and painted rocks for colour in the garden.

**Dipton School**

We would like to thank you for the donation towards our ‘adventure circuit’. We used the money to go towards buying all the wooden beams. We have not constructed our circuit yet because we needed some more money to go towards the sand, concrete and building costs. We now have all the money we need, and a bit extra to buy more plants on our wish list and wooden signs for each activity which we are going to name after each member of the Envirogroup this year. Now that the ground has dried out we are hoping to get the tractor on the field to drive the posts in, so it will be all go from now. We will send you a photo when it is done, maybe you can come and have a go!
Longford Intermediate School

Thank you for donating money so we can buy some trees for our school. We bought 10 trees which were a variety of oak. They have been planted around our playing field.

We planted them over two lunch times. First we dug some big holes, applied fertiliser and drove in two stakes per hole. Then we planted the trees and afterwards some of our group named the trees. We called them Pikey, Oakeydokey, Stick, Loaka, Chopchopchop, Kindling, Wood, Jedakiya, Maple and Sparky.

We chose oak trees because they will grow very large so they can give us lots of shade and they are also deciduous, so no-one complains about losing the sun in winter. The roots grow downwards instead of outwards so they won’t get in the way of pipes and very important underground things.

Fiordland College

Yellow bins were introduced at Fiordland College for paper collection in 2010. However, the bins were not emptied regularly as there was no collection system in place. Staff and students investigated multiple options with different organisations but cost was prohibiting. Kerbside recycling was introduced in Te Anau in 2012 and the opportunity arose for us to use this system. Again this was going to be at an additional cost to our current waste disposal. When funding became available in 2014 through Enviroschools, a group of students investigated the costs and options. We discussed the logistics with a group including the Deputy Principal, cleaner, students, Enviroschools link teacher and the Student Council. One student contacted and negotiated with Wastenet to attach recycling to the rates we already pay and just pay for extra bins. This happened and we were delivered two large yellow wheelie bins.

We now have a class allocated as the ‘recyclers’ each term. Two people take the yellow wheelie bin around each form class each Friday and collect the paper and plastic. Other classrooms are collected during the day. Our awesome cleaner, Shirley, empties the yellow recycling bins from the administration block (teacher’s offices, photocopier and staff rooms) and the library. She also puts the two wheelie bins out on Howden Street every second Monday morning.

Our next step is to investigate recycling bins outside classrooms and a method for cleaning plastics such as yoghurt pottles, before they go in the recycling bins, as well as a system for composting food scraps (we currently have a Bokashi bucket in the staffroom.)
**Enviroschools highlights**

Newfield Kindergarten

It has been action packed since we signed up, with the children being involved in many activities that developed their understanding of the environment, which included making a new garden for potatoes, composting and growing experiments, the introduction of an enviro monitor position, pea and bean growing, building a weta sanctuary, and watching clips and stories around having a ‘plastic planet’ and water pollution. Through these experiences, conversations and art, the children are developing theories about what makes the earth happy or sad.

Riverton Primary School

Over the past two terms the children at Riverton Primary School have been studying the twisting turning Pourakino River and Valley. They have found many hidden treasures during their stream study. The focus for term four is to join the Pourakino Catchment Group and lend a hand replanting natives. Early in term three, 10 children visited Scoreby’s Primary in Melbourne, Australia to discuss sustainability in a big city versus our (semi) rural school (and sightseeing of course).

The Te Hikoi Rockhound Club opened its doors a few weeks ago (well worth the visit). So, we have taken full advantage of this by rock hunting around our local area. The sites are very accessible, just like Tihaka Beach.

What’s in the Longwoods? Children love to explore this area. They find vine swings, hunt for native trees and bug life, run through the tailraces, watch the crawlies and glowworms in their habitats. At school the children tend to the heritage apple trees and potter around in the garden opposite the school all the time.

Limehills School

This term the year eights have been working with the year fours identifying problems in our school and finding solutions for these. Some of our projects include a new rubbish reducing system, fixing the drainage problems on the school farm, making an Enviroschool Museum and making murals for our community. Follow our progress at: http://limehillsenviroschools.blogspot.co.nz

Lees Street Kindergarten

This term we put in a hydro gardening system in the tunnel house to see if we can grow vegetables more successfully. So far, so good. We have a supply of spinach and the tomatoes are looking much healthier. We continue to nurture native seedlings in our nursery. We are continuing with our ‘zero waste’ project, which is harder than you think. We want to start a tracking project with the children to see which types of creatures frequent our kindergarten when we are not here. We did a study of ‘bees’ for bee awareness month in September. The children and teachers learnt so much about bees and just how clever they are. We are now planting more plants that attract bees. Parents were impressed how much their children were telling them.

We had a very busy year with regards to our environmental learning. (*Lees Street were also the winners of the Environment Southland schools award – Ed.*)
What is coming up in 2015?

- Enviroschools Secondary Leadership Hui 19–20 February
- Seaweek 28 February – 8 March
- 2015 Southland Environment Awards nominations open 23 March. Check our website in March for details and a nomination form to nominate your school.
- Enviroschools Teacher Workshop 21 May
- Education for Sustainability Workshop 17 June

The environmental education team at Environment Southland can help your school with a number of environmental topics. We have teacher resource packs on estuaries, groundwater, wetlands and pest animals. These packs include information and ideas for inquiry and activities you can do with your class.

We have a Stream Connections programme which has information and classroom activities and we can help with a stream study field trip. We also can come to your school with our EnviroScape model. It is a great tool for understanding how water moves through a catchment and the effects on the receiving environment. Plus we can support your coastal studies through the Marine Metre Squared programme, which takes coastal discovery further into data analysis and long term monitoring at many levels. We will also try to help with any other environmental topics you have.

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

Telephone 0800 76 88 45 (Southland only) or email education@es.govt.nz

Thank you to our

Southland Enviroschools Partners

Environment Southland coordinates and facilitates the Enviroschools programme in Southland with financial assistance from the Southland and Gore District Councils and the Invercargill City Council. Southland Kindergartens Association provides facilitation for the kindergartens participating in the programme.