

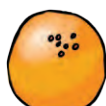


**Nelson City Council**  
te kaunihera o whakatū

# Small Planet



**An environmental education resource for small people**

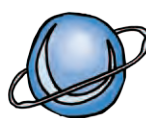
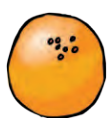


### About this resource:

Small Planet was developed by Nelson City Council with assistance from Sarah Langi (Waste Education Services (WES), Emma Heke (creator of **OURS** DVD) and Kate Cobb (Enviroschools).

Many ECEs had expressed difficulty in finding direction to progress on this journey in a way that supports the early childhood curriculum (Te Whāriki). In 2009, a Small Planet trial was held to assess whether a structured programme encouraging ECEs to engage in sustainable actions including waste reduction projects would result in longer-term embedded practices supporting these outcomes. The trial was run with Nayland Kindergarten, Enner Glynn Playcentre and Bridge Street Early Learning Centre. Programme feedback was positive, with value being seen in terms of supporting ongoing learning journeys in a pre-school setting, particular in support of Te Whāriki.

Small Planet is just one step along the road to sustainability. If you have enjoyed this programme and would like to learn more, contact the Enviroschools coordinator (see contact list) for information about the Enviroschools programme.



# Small Planet

Everything is connected – how we live affects the health of our planet. In the face of threats from climate change, peak oil, dwindling resources and escalating world population, learning to live sustainably is crucial to ensure a positive and healthy future. We need to 'future-proof' our children by encouraging them to explore the world around them with a sense of awe and joy, respect all

living things and understand the connections between them, use resources wisely, and grow food.

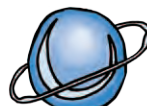
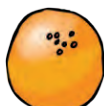


## What is Small Planet?

Many ECEs (Early Childhood Education centres) already actively engage their students in learning about their environment. Small Planet is an educational resource designed to both recognise and reward existing activities and to act as a framework for planning future environmental projects. The programme is designed to be self-managing by each ECE, whereby each centre chooses and runs activities that help children to engage with their environment.

## What do we mean when we talk about sustainability?

Sustainability is about meeting the needs of today without impacting on the needs of tomorrow.



## How Small Planet relates to Te Whāriki

Learning for sustainability fosters the concept of **kaitiakitanga**, which means guardianship of the environment and is customary to Māori. Learning about our environment and how we intimately connect to it and depend upon it empowers our children to become **kaitiaki** and take an active role in nurturing all living things. This empowerment is the key to learning for sustainability, where children gain the confidence and skills to create positive change.

Small Planet upholds the **Principles** and **Strands** of Te Whāriki by promoting a learning environment that is holistic, rich in diverse learning experiences, and where children know that they can make a real difference to the world around them.

### The Principles

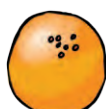
Small Planet upholds all the Principles of Te Whāriki as children are empowered to work with each other and the wider community and make changes within a holistic learning environment.

Principles	Actions
Whānau Tangata / Family and Community	Taking pumpkin seeds home to plant and give to neighbours
Ngā Hononga / Relationships	Working with others to sort out the recycling
Kotahitanga / Holistic Development	Watching caterpillars make a cocoon and hatch into a butterfly, making caterpillar masks and butterfly wings to re-enact the metamorphosis, finding out about other creatures that metamorphose
Whakamana / Empowerment	Being given responsibility for feeding the worms in the worm farm

### The Strands

The Strands of Mana Aotūroa / Exploration and Mana Whenua / Belonging are maintained and strengthened as children explore the natural world and develop a sense of their relationship with other living creatures and their environment. As children work together, sharing their ideas as they help to create a healthy and sustainable environment, the Strands of Mana Reo / Communication, Mana Atua / Well-being and Mana Tangata / Contribution are supported.

Principles	Actions
Mana Aotūroa / Exploration	Searching in a stream to see what creatures and plants live there
Mana Reo / Communication	Explaining to others what food the worms like
Mana Atua / Well-being	Becoming aware of which places make them feel safe and peaceful
Mana Tangata / Contribution	Taking responsibility for feeding the worms
Mana whenua / Belonging	Celebrating their hard work in the garden by harvesting and baking their potatoes and sharing them for lunch.



## How Small Planet works – just a few easy steps!

There are NO deadlines or time constraints! Small Planet is available to ECEs in Nelson upon request.

Each ECE will manage Small Planet within their own centre by:

- choosing their activities,
- deciding when a milestone has been reached,
- recording each project (e.g. by creating a learning story, video, poster. This record is for your own information.), and
- Celebrating!

### Step 1. Contact your Small Planet Council Coordinator

Register for the programme and receive the Small Planet pack, which includes a manual, milestone poster and the Ours DVD produced by local film maker Emma Heke.

#### Small Planet Coordinator:

Karen Lee: Phone (03) 5460339; karen.lee@ncc.govt.nz

#### Small Planet Facilitator:

Sarah Langi: Phone (03) 5459176; sarahlangi@nec.org.nz

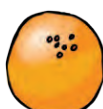


#### The facilitator:

- Can answer e-mail enquiries and support the Wiki, which will be a growing resource base for activity information and shared resources (information available from facilitator).
- Can visit you to assist with projects (particularly waste related projects such as composting, etc). Please note that there are a limited number of visits available, with a waiting list system operating once this number has been exceeded.
- May be able to arrange for parent education sessions, e.g. on sustainable living, composting and other relevant topics.

### Step 2. Decide on your project(s)

Each ECE will choose its own projects, either through an enquiry-based approach or using the children's ideas. ECEs may also wish to use the list of suggested activities in this manual as a starting point for other project ideas. A project may be as simple as having a packaging-free lunch day, or may be longer-term, e.g. establishing a packaging-free ECE.





### Step 3. Take action!

Remember to involve the children at every stage along the way and don't forget to take lots of photos (check your photo policy first)! If you need any help to carry out your ideas, your facilitator can assist or put you in touch with someone who can help.

### Step 4. Record what you have achieved

You might like to make a learning story, a video or a poster to record your project for your own information and to help you decide when you have reached a milestone to celebrate.

### Step 5. Celebrate!

Each Small Planet poster has 4 planet 'spaces' on it. The completion of each project is marked as a milestone and celebrated by adding a planet to the poster.



When you are ready to share your learning story with the children, ask them if they think they have reached a milestone and can add a planet to the poster. If they agree, ask them to put a planet onto the poster and discuss what their next project might be.

Have a shared lunch or morning tea (eat something you have grown!)

You may wish to invite your council's Small Planet Coordinator to attend your celebration.

If she/he is available, she/he may bring your next Small Planet poster to give to the children.

When you have finished four projects and have all four planets in place, you will have completed your first poster.

**Kei te pai!**



## Step 6. Start your next Small Planet poster

Each time a planet poster has been completed, participants can choose to start another planet poster, which allows for continuous involvement. There are 8 planets over two posters (i.e. 8 potential projects).



Off you go again with your next project!

## Health and Safety Notes

There are a few potential health and safety issues associated with environmental education, so please ensure you consider the following points:

- If children are outside during the day, ensure that sun protection is worn.
- After being in the garden, remind children to wash their hands thoroughly with warm, soapy water.
- Remind children to keep their hands out of their eyes and mouth while digging or planting.
- Inhaling compost fumes can cause Legionnaires Disease; providing masks and gloves may help prevent this if children are working directly with compost.
- Have specific guidelines in place when children are working with garden tools and equipment.
- Avoid potentially toxic plants in the grounds. (These are listed at <http://www.landcareresearch.co.nz/publications/infosheets/poisonplants/>).



# Small Planet activity ideas

Here are some activities you may wish to try; you may have your own ideas already!

Remember to include the children's ideas and suggestions at every possible opportunity.



You will find useful links and references among the listed activities or in the resource list at the end of this section.

## Māori legends

Introduce the concept that Papatuanuku is our living mother: she gives us life and we need to respect her and all living creatures. Ranginui our sky father gives us rain so the plants and trees can grow. Introduce the other Atua and talk about

the qualities they represent: e.g. Tamanui Te Rā the sun and Tānemahuta the Atua of the forest and everything that lives in it.

Encourage the idea of caring for and nurturing living things. Discuss how we can become kaitiaki for the planet and talk about what that means. (Watch He Pae Korero, the EnviroSchools dvd of Maori legends.).

## Connect children with their environment:

- In the garden: lie down and close eyes: listen for the sounds you can hear.
- Count how many plants and living animals you can find.
- Look in leaf litter under a tree for mini beasts.
- How many different-shaped leaves can you find?
- Look for certain colours in your environment (Give children colour cards from paint shops to match with something outside).
- Look for insects coloured for camouflage and those that are vivid.
- Listen to the heartbeat of a (deciduous) tree with a stethoscope.
- Which parts of your centre do you like/dislike—why?
- Can you find a place where you feel safe/peaceful/scared/etc.?
- How can we make the areas we don't like better?





# Great things to do with waste!



## THE 3 RS: REDUCE, REUSE, RECYCLE

### Reduce:

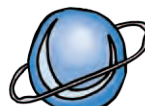
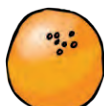
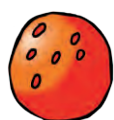
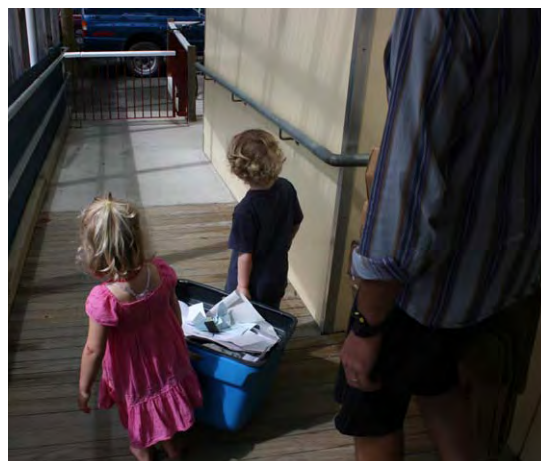
- Make cloth bags to take shopping: children design and paint their own to reduce plastic bag waste.
- Conduct experiments. Bury separate balls of plastic lunch wrap, paper wrap and food scraps in 3 different holes in garden. Dig up 3 months later, analyse results to see what decomposes and what doesn't (**Waste Not** kit - [www.wes.org.nz/schools-resources](http://www.wes.org.nz/schools-resources)).
- Decide as a group about rubbish-free lunchbox policy based on findings!
- Make cleaners from environmentally friendly recipes to reduce pollution. (**Sustainable Living Programme** – [www.sustainableliving.co.nz](http://www.sustainableliving.co.nz) has recipes).
- Make non-toxic bug sprays (garlic, chili) to reduce toxic products in gardens.

### Reuse:

- Make puppets using old socks and buttons for eyes.
- Use material off-cuts and old clothes to make stuffed soft toys (Children draw designs and cut patterns to make a toy with teacher/grandparent/parent on sewing machine.)
- Use milk cartons, yoghurt pots, cardboard rolls as seedling containers.
- Use junk mail for native bird artworks (**OURS** DVD-Ideas Topic).
- Use cardboard boxes, plastic lids, cotton reels, packaging, magazines, etc. to make robots, dolls houses, cars, and more.
- Make a Zerowaste birthday throne, a table, a chair (in fact anything!) out of tetra-pak bricks stuffed with plastic, non-recyclable rubbish. (**OURS** DVD or **Ecobuzz** Term 2, 2009 <http://www.wes.org.nz/files/Ecobuzz%20Term%202%20May%202009.pdf>)
- Make bowls from egg cartons (<http://zakkalife.blogspot.com/2008/09/how-to-make-miniature-bowls.html>)

### Recycle:

- Make recycled paper (**Waste Not** kit - [www.wes.org.nz/schools-resources](http://www.wes.org.nz/schools-resources)).
- Involve the children fully in filling the recycling bins, feeding the worms and emptying the compost bin.
- Organise a trip to the Recycling plant.
- Compost your food and garden waste (see next section).



## Organic Waste/Composting:

There are three main ways of processing organic waste (food scraps and garden waste). Learning how to turn organic waste into rich food for the garden is an essential skill for growing food. Choose which method(s) would suit your centre. (Your Facilitator can demonstrate each method and advise.)

### Worm farming

Worm farms provide a rich learning context, especially for young children. They produce both vermicast, a super-concentrated form of compost, and worm tea, a magic potion for feeding plants. They are excellent for food scraps; however, some foods are not suitable (citrus fruits, meat, fish, onions, garlic).

- Set up a worm farm (**Waste Not** kit - [www.wes.org.nz/schools-resources](http://www.wes.org.nz/schools-resources)).
- Make individual worm farms (ask your Facilitator for instructions).
- Hunt for other animals who live in your worm farm (**Waste Not** kit).
- Sell your worm tea to parents as a fundraiser (let the children design the labels).
- Worm recipes (**Waste Not** kit).



### EM Bokashi

EM Bokashi is a very simple method of composting in an airtight, sealed bucket, using anaerobic micro-organisms (rather than worms!). It is ideal for processing food scraps as it does not attract flies and can take all types of food, including citrus, meat, fish, onions, and ham sandwiches. A rich compost and a powerful liquid plant food are also produced. However, as micro-organisms rather than worms do the work, there is not much for little children to see. Bokashi sets are available from a range of suppliers – see the Council “Create Your Own Eden” compost subsidy form for details.

- Set up a bokashi system for your food scraps.
- Let the children collect the food scraps and run the system.

### Composting

Composting is useful for processing your garden waste (grass clippings, leaves, etc.) as well as food scraps. Children can learn to get the balance of ingredients right: if they only use their food scraps (nitrogen-rich) they need to add other carbon-rich material too—paper, dry leaves, straw, etc. A Nelson City Council “Create Your Own Eden” teaching pack for composting is available with the Small Planet resource.

- Collect ingredients to build a compost heap (compare it to making a cake)—seaweed from the beach, leaves, twigs, shredded paper, grass clippings, food scraps, beneficial weeds.
- Use an Archimedes screw tool to turn the heap.
- Check the compost regularly to see what changes are occurring.
- Let the children fork the compost into the wheelbarrow and spread it on the garden.
- Check the compost for worms and other creatures



## Other ideas from our natural world!

### Growing

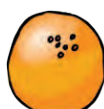
A selection of delightful books is listed in the Resource section on this topic.



- Grow food, cook it and eat it (strawberries, raspberries, peas, cherry tomatoes, lettuce, corn and salads to pick and eat in summer; silverbeet, beetroot and pumpkin for soup in winter, zucchini muffins, baked potatoes... can be as simple as spuds in a sack, herbs in a pot, beans in a jar). (<http://ooooby.ning.com/> Ooooby (Out of our own back yards) is an online network of food gardeners.
- Find out how seeds grow (<http://www.kidzone.ws/science/seeds.htm>) or grow plants in hydrogel to watch the roots and shoots develop.
- Plant gardens to attract butterflies (**OURS DVD** and **The Very Hungry Caterpillar**, <http://www.greenurbanliving.co.nz/index.php?Cid=100057&Aid=74> )
- Plant gardens to attract native birds, skinks and snails (hold snail races!).
- Create bean tunnels, sunflower houses.
- Collect seeds (seed collections, seed pictures, seeds to give to parents).
- Make a scarecrow out of junk materials.
- Make seed balls for re-vegetating areas with native plants (Ask your Facilitator for instructions.).
- Plant fruit and nut trees, a feijoa hedge, grape vines.
- Sprout seeds to eat – alfalfa, mung, pea, cress, etc.
- Learn how seeds are dispersed by wind, water, animals and birds (**The Tiny Seed**, <http://theseedsite.co.uk/dispersal.html>)
- Make 'grass people' – reuse old stockings, fill with soil and seed to sprout grass hair.
- Other ideas for the garden (<http://www.greenurbanliving.co.nz/index.php?Cid=100059&Aid=76>)

### Birds:

- Make bird feeders - pine cones with peanut butter and seeds, fruit and bread scraps on a plate nailed on top of a post, honey and water in a recycled plastic milk container/dish([www.doc.govt.nz/conservation-week/take-action/at-home/](http://www.doc.govt.nz/conservation-week/take-action/at-home/)).
- Make bird feeders from items purchased from your local recycle centre (Nelson Environment Centre Pascoe Street, Revive shop Beach Road Richmond, Mariri and Takaka).



- Make fun recipes to attract birds to your garden (**Tea for the Tui** and **OURS DVD**- Pudding for Birds topic, <http://www.doc.govt.nz/conservation-week/take-action/at-home/>).
- Make a bird bath.
- Plant a kowhai and other trees to attract tui and other native birds. (Contact Nelson City Council's Sustainable Land Management Adviser on 03 546 0308 for advice on biodiversity in Nelson).
- Learn to recognize native birds (<http://labarker.com/NZbirds.html>).

### Weather:

- Lie and watch the clouds, look for shapes (Little Cloud).
- Learn a few basic cloud types, what they mean and what weather they may bring. (<http://www.wxduke.com/page9.html> ).
- Make a rain gauge and measure the rainfall (Ask your Facilitator for instructions.).
- Make a sundial on a paved area and measure the shadow lengths in chalk.

### Wildlife:

- Build a Weta hotel and observe these fascinating creatures (<http://www.doc.govt.nz/conservation-week/take-action/at-home/>, weta <http://www.kcc.org.nz/animals/weta.asp>, weta facts <http://www.doc.govt.nz/conservation/native-animals/invertebrates/weta/facts/>
- Look for birds and minibeasts to see how green your garden is (<http://www.doc.govt.nz/conservation-week/take-action/at-home/>).
- Make homes for lizards in the garden (<http://www.doc.govt.nz/conservation-week/take-action/at-home/>).
- Build a bug hotel (<http://www.greenurbanliving.co.nz/index.php?Cid=100039&Aid=31>).

### Pests:

- Paws and Poos: record the footprints (and sometimes poos) of mice, rats, possums, etc. in a tracking tunnel. Put one by your compost bin and act as detectives, "is that a hedgehog's paw print?" (<http://www.doc.govt.nz/conservation-week/take-action/at-home/>) tracking tunnels <http://cms.connovation.co.nz/content/documents/Features-Pest-Tracking-System.pdf>
- Contact Brook Waimarama Sanctuary to go on a field trip and learn about local pests [www.brooksanctuary.org/](http://www.brooksanctuary.org/), email: [info@brooksanctuary.org](mailto:info@brooksanctuary.org).

### Freshwater:

- Adopt your local stream and find out what lives in it, monitor it regularly and care for it (by planting natives along the stream bank). For advice contact Nelson City Council's Sustainable Land Management Adviser on 03 546 0308.
- Grow frogs from tadpoles (<http://www.nzfrogs.org/Resources/Kids+Information/Keeping+Frogs.html>).
- Find out about how tuna (eels) transform themselves for their long migration to Tonga (watch Longfin. <http://www.longfinfilm.com/>).







## Marine:

- Visit Touch the Sea Aquarium, Mapua Wharf
- Visit some rock pools: "What can we find? How do the creatures and plants relate to each other?" (<http://www.nationalaquarium.co.nz/aquatic-life-nz-rocky-shore.asp>,
- <http://www.enchantedlearning.com/biomes/intertidal/intertidal.shtml>)
- Build penguin nesting boxes and find out why penguins might need these boxes – Kiwi Conservation Club (<http://www.penguin.net.nz/species/blue/bluenest.html>) <http://www.doc.govt.nz/upload/documents/conservation/native-animals/birds/sea-and-shore/factsheet-1.pdf>
- Collect seaweed after a storm for the compost.
- Collect and sort feathers, shells and pebbles, "where do they come from?"

Books by Eric Carle: **Mister Seahorse** and **A House for Hermit Crab**, also KCC Magazine No. 96 Marine Reserves.

## Saving precious resources

### Transport:

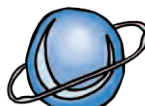
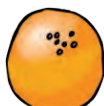
- Find out: How do we get to our ECE? Talk about the alternatives to one family travelling in a car. (ideas: share journeys with your neighbours; encourage parents to drive their cars to a designated point and walk the rest of the way to school; organise a bicycle bus, a walking bus or a walking crocodile (children with egg carton croc. masks and parents in front and behind dressed as the head/tail!))
- Put together a travel plan - contact the Council School Travel Planner on 546 0214 or by e-mail: [schooltravellplanner@tdc.govt.nz](mailto:schooltravellplanner@tdc.govt.nz)

### Energy:

How did people manage without energy in the 'olden days'? What would happen if we didn't have energy now? How could we cook food? What about lights?

### Water:

Find out where water comes from. (<http://www.kidzone.ws/water/>)





## Case Studies

### Case Study of an Enviroschool: Kidsfirst Kindergartens Lincoln, Canterbury

[From the Enviroschools Scrapbook 2005]

#### Mapping:

The children, teachers and parents mapped their environment and identified an area that was not really used.

#### Planning:

Through discussion with the children, they identified the changes they wanted to make and designed landscape plans (a koru). With support from the Kidsfirst Kindergartens Association to allow the work to be carried out during session time so that the children could be fully involved; and a local landscaper who was happy to let the children do as much of the work as possible, we were able to complete their design.

#### Excavating:

The first step was for the children to remove the old bark, soil and bricks and find ways to re-use these elsewhere around the kindergarten.

#### Preparing concrete:

The children measured quantities of water and put it into the concrete mixer with the cement and stones.

#### Concreting:

They all mucked in to level and smooth the concrete within the boxed area. Many children re-enacted the boxing, concreting and stones koru in their sand play.

#### Sorting stones:

We sourced stones from our local area, sorting them into colour groups, and then placed them in the concrete to make a koru pattern as in the plan.

#### Planting:

Barrels were used to make vegetable gardens. The children identified the vegetables they wanted to grow, planted these and made name tags to identify them.

#### Guardians of the Earth:

The children are very enthusiastic in caring for and maintaining their garden.

#### Tasting:

The best part is eating the fruits of their labours—strawberries, cherry tomatoes, carrots and parsley.



## Case Study of an Enviroschool: Papamoa Coast Kindergarten, Bay of Plenty

[From the Enviroschools Scrapbook 2006]

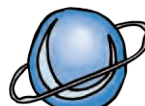
### Litter-Less Lunch Policy

Rationale: Papamoa Coast Kindergarten Staff are committed to caring for our environment and encouraging healthy eating among all our families.

The Litter-Less Lunch Policy is intended to provide guidance to ensure that we all support this commitment.

Packed lunches brought into the kindergarten will not contain any non-recyclable packaging, pre-packaged and individually wrapped food (e.g. muesli bars, chippies, roll-ups, lollies).

Paper sandwich wrap and washable containers are advisable. Only water is permitted as part of children's packed lunches. The kindergarten staff will offer advice and guidance to all families to help them support this policy.



## Small Planet Resource List

### Useful contacts:

#### Nelson City Council:

- Karen Lee, Sustainability Coordinator – 546 0339, e-mail: karen.lee@ncc.govt.nz for information on Small Planet resource and sustainability programmes at Council.
- Jo Martin, Environmental Educator – 545 8728, e-mail: jo.martin@ncc.govt.nz for support for primary and secondary education sector and information on educational resources and education/information on Clean Heat Warm Homes air quality programme
- Lynne Hall, Sustainable Land Management Adviser - 546 0303, e-mail: lynne.hall@ncc.govt.nz for information on conservation and biodiversity programmes at Council, including Weedbusters and stream side planting
- Sarah Downs, School Travel Planner - 546 0214, e-mail schooltravelplanner@tdc.govt.nz

#### Nelson Libraries

For information on learning resources call 546 0409 or go to [www.nelsonpubliclibraries.co.nz/for-kidz/](http://www.nelsonpubliclibraries.co.nz/for-kidz/). This will give you access to a wide range of on-line learning resources and activities or browse the catalogues for books and dvds.

#### Enviroschools – service funded by Nelson City Council:

Kate Cobb, Regional Coordinator – tel: 540 8293, e-mail: enviroschools@ncc.govt.nz for information on the national Enviroschools programme

#### Waste Education Services – service funded by Nelson City Council:

Sarah Langi, Nelson Environment Centre – 545 9176, e-mail: sarahlangi@nec.org.nz for information on the 3 Rs – REDUCE, REUSE, RECYCLE, rubbish-free lunches, Worm farming, EM bokashi, composting and waste audits.

#### Waimāori:

Waimāori Streamcare Programme (partially funded by Nelson City Council): a facilitator works with groups of children to monitor and care for local streams. Particularly appropriate for young children are learning what freshwater means to Maori and finding and learning about the insects and other stream life and what they mean for the health of your local stream.

Contact: Melanie McColgan

Tel: 021 0271 8367

Email: waimaori@ncc.govt.nz

#### Nelson Marlborough District Health Board

Anne Price - Early Childhood Health Promoter

Tel: 546 1536

Email: anne.price@nmhs.govt.nz



### **Marine Studies:**

Touch the Sea Aquarium (Mapua)

Tel: (03) 540 3557



### **Department of Conservation (DOC):**

Jazz Scott, Conservation Awareness Officer - 546 3152, e-mail: [jscott@doc.govt.nz](mailto:jscott@doc.govt.nz) for information on conservation related activities and resources.

### **Brook Waimarama Sanctuary:**

Rick Field, 546 9175, ext.683, e-mail: [info@brooksanctuary.org](mailto:info@brooksanctuary.org) /[www.brooksanctuary.org/](http://www.brooksanctuary.org/) for field trips and education for conservation and wildlife management.

### **Community gardens:**

Waimarama Community Gardens

Tantragee Road (off Upper Brook Street), The Brook, Nelson

Tel: (03) 548 4575

Email: [waimarama@actrix.co.nz](mailto:waimarama@actrix.co.nz)

Victory Community Gardens

Totara Street, Nelson

Tel: (03) 546 8381



### **Nelson Environment Centre**

Community organisation supporting sustainability in Nelson.

Tel: 546 1976

[www.nec.org.nz](http://www.nec.org.nz)

### **Useful Websites**

Enviroschools website: [www.enviroschools.org.nz](http://www.enviroschools.org.nz)

Kiwi Conservation Club: [www.kcc.org.nz/index.asp](http://www.kcc.org.nz/index.asp)

Kiwi Conservation Club: [www.kcc.org.nz/educators/intro.asp](http://www.kcc.org.nz/educators/intro.asp)

Earthkids:

[http://www.acfonline.org.au/default.asp?section\\_id=127](http://www.acfonline.org.au/default.asp?section_id=127)

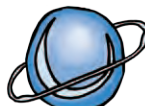
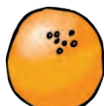
Ecokids: [www.ecokids.co.nz](http://www.ecokids.co.nz)

Sharing Nature Worldwide, Joseph Cornell books and games: <http://www.sharingnature.com/index.php>

Environmental Monitoring and Action Project:

<http://www.emap.rsnz.org/>

Waimāori Streamcare Programme:



<http://www.nelsoncitycouncil.co.nz/waimaori-stream-care>

Panda Club (World Wildlife Fund):

[http://www.tki.org.nz/r/wick\\_ed/cool/archives/wwf-panda.php](http://www.tki.org.nz/r/wick_ed/cool/archives/wwf-panda.php)

Wa\$ted tv series: [www.wastedtv.co.nz](http://www.wastedtv.co.nz)

[www.zerowaste.co.nz](http://www.zerowaste.co.nz)

<http://www.wasteminz.org.nz/lifeafterwaste/lifeafterwaste.pdf>

<http://www.zerowaste.co.nz/default,259.sm> (Buy it Back Guide: where to buy recycled goods)

[www.reducerubbish.govt.nz](http://www.reducerubbish.govt.nz)

National Heart Foundation: [www.nhf.org.nz](http://www.nhf.org.nz)

[www.sustainableliving.co.nz](http://www.sustainableliving.co.nz)

[www.teamup.co.nz](http://www.teamup.co.nz)

[www.ecomatters.org.nz](http://www.ecomatters.org.nz)

[www.consumer.org.nz](http://www.consumer.org.nz)

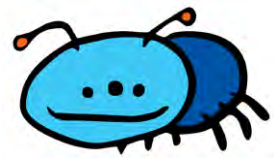
[www.olliesworld.com](http://www.olliesworld.com)

[www.cleansweepusa.org/waste\\_intro.aspx](http://www.cleansweepusa.org/waste_intro.aspx)

[www.cleansweepusa.org/landfill\\_intro.aspx](http://www.cleansweepusa.org/landfill_intro.aspx)

[www.kidsrecycle.org/index.php](http://www.kidsrecycle.org/index.php)

[www.wastefreelunches.org](http://www.wastefreelunches.org)



## **Nelson Environment Centre**

[www.nec.org.nz](http://www.nec.org.nz)

## **Composting**

<http://www.createyourowncden.org.nz/>

<http://www.reducerubbish.govt.nz/compost/tips/html>

## **EM Bokashi:**

[www.bokashi.co.nz](http://www.bokashi.co.nz)

<http://www.createyourowncden.org.nz/>

## **Worms**

[www.worm.co.nz](http://www.worm.co.nz)

[www.wormsrus.co.nz](http://www.wormsrus.co.nz)

<http://www.createyourowncden.org.nz/>

Permaculture worm cylinder:

<http://www.youtube.com/watch?v=scUTrypzyY0&feature=related> worm farm cylinder

[http://www.greenharvest.com.au/School\\_Gardens/school\\_garden\\_index.html](http://www.greenharvest.com.au/School_Gardens/school_garden_index.html)





## Gardening

Delightful books for children on gardening, seed saving, and much more:

[http://www.greenharvest.com.au/School\\_Gardens/school\\_garden\\_index.html](http://www.greenharvest.com.au/School_Gardens/school_garden_index.html)

<http://ooooby.ning.com/> Oooooby (Out of our own back yards) is an online network of food gardeners.

## Books

- **Charlie and Lola – Look After Your Planet** by L. Child. ([www.puffin.co.uk/nf/Book/.../0,,9780141384368,00.html](http://www.puffin.co.uk/nf/Book/.../0,,9780141384368,00.html) /) used with great success by Cherry's ECE, Christchurch. The book includes a tree template onto which 'leaves' can be stuck as recycling gets brought in by the children. Once the tree is full, take the children to purchase a native tree to plant.
- **Waste Not** by Waste Education Services. (Teachers' resource, can be downloaded from - [www.wes.org.nz/schools-resources](http://www.wes.org.nz/schools-resources)).
- **George Saves the World by Lunchtime** by J. Readman and L.H. Roberts. Eden Project: [www.edenproject.com](http://www.edenproject.com)
- **The World Came To My Place Today** by J. Readman and L.H. Roberts. Eden Project: [www.edenproject.com](http://www.edenproject.com)
- **Rubbish!** Everything you wanted to know about rubbish, landfills, recycling and worms by R. Goddard. 2007. Reed Publishing, Auckland. ISBN 978 1 86978 014 2.
- **Tea for the Tui** by R. Tully. 2007. New Holland (NZ) Ltd. ISBN: 9781869661670.
- **Old Blue, the Rarest Bird in the World** by Mary Taylor.
- **E3 Call Home** by Janet Hunt [www.randomhouse.co.nz/data/media/documents/teacher%20notes/E3\\_Call\\_Home\\_TN.pdf](http://www.randomhouse.co.nz/data/media/documents/teacher%20notes/E3_Call_Home_TN.pdf)
- **Wild Things** (Kiwi Conservation Club Magazine), e.g. No. 101 Wild Rivers, No. 79 Native Freshwater Fish and No. 96 Marine Reserves

## Gardening Books:

- **Sunflower Houses** by Sharon Lovejoy, also
- **Roots, Shoots, Buckets and Boots** by Sharon Lovejoy. Workman NY ([www.workman.com](http://www.workman.com))
- **A Child's Garden** by Molly Dannenmaier. Timberpress books. ([www.timberpress.com](http://www.timberpress.com))
- [www.florisbooks.com.uk](http://www.florisbooks.com.uk)
- **Seed to Seed: Food gardens in schools** by Jude Fanton and Jo Immig. 2007.
- **The Tiny Seed** by Eric Carle. 1970.
- **Stamp, Stomp, Whomp and other interesting ways to get rid of pests** by Jackie French. 2000. [http://www.greenharvest.com.au/School\\_Gardens/school\\_garden\\_index.html](http://www.greenharvest.com.au/School_Gardens/school_garden_index.html)
- **The NZ School Gardening Handbook** by Keli Jones. ISBN 978-1-4425-1864-3.
- **Companion Planting in New Zealand** by Brenda Little. 2000. ISBN 1877246417.
- **Growing Gardeners** by Dee Pigneguy. ISBN 978-0-9582966-0-1.



## Books by Eric Carle

<http://www.eric-carle.com/ECbooks2.html>

- **The Tiny Seed.** 1970.
- **The Very Hungry Caterpillar.** 1969.
- **The Honeybee and the Robber.** 1981.
- **The Very Busy Spider.** 1984.
- **A House for Hermit Crab.** 1987.
- **The Very Quiet Cricket.** 1990.
- **Little Cloud.** 1996.
- **Mister Seahorse.** 2004.



## Movies

**OURS** by Emma Heke <http://www.oursdvd.co.nz/> An environmental DVD for young children containing close encounters with playful seals and shy Hoiho, boisterous Kakapo chicks and worm gobbling Kiwi. See a Monarch butterfly emerge from a chrysalis, experience spurting geysers and explosive mud pools! See majestic native Kauri, giant snails, rainbows, frosts and storms, fascinating fungus and children saving the planet.

**Longfin** by Lindsey Davidson & Melissa Salpietra. <http://www.longfinfilm.com/>  
Gives a spiritual and magical glimpse into the life of the endemic NZ longfin eel.

**He Pae Korero** EnviroSchools short stories, Maori legends and myths [www.enviroschools.org.nz](http://www.enviroschools.org.nz)

## Songs

**Daisy Face, Home free** and other dvds by Anna Rugis. [www.enviromusic.co.nz/](http://www.enviromusic.co.nz/)



Rad no:889995

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