

Get involved in Conservation Week 2009 with these five activity ideas

You can use these needs based activities to help your class get involved in conservation. You can adapt these activities for any level.

- The curriculum value is Ecological Sustainability
- The key competency is Participating and Contributing
- The future focus theme is Sustainability

Under the banner of Environmental Education and Education for Sustainability the students will engage in aspects of:

- The Social Sciences
- Science (The Living World)
- Technology
- English
- The Arts

The five activity ideas are:

- Activity 1: Plan your own conservation project
- Activity 2: Invite wildlife into the school grounds
- Activity 3: Environmentally friendly entrance ways
- Activity 4: Growing and sharing eco sourced plants
- Activity 5: Start recycling at school

Activity 1: Plan your own conservation project

Celebrate Conservation Week by planning a project in your school.

Learning outcomes

Students will:

- identify a need
- decide what to investigate
- get involved in investigations
- consider solutions
- choose a solution
- make plans
- present their ideas.

The best plans are easy to action. They're the next step in real involvement!

1. Write a summary of your plan

- Include a photo that illustrates your local conservation need.
- Describe your solution.
- List actions you've planned that will lead to success.

2. Use the ideas success test to determine how your project will work out

Ideas success test

If you tick all or nearly all of these things for your idea, there is a very good chance it will work!

Motivation - We want to do it because:

- we will really enjoy doing it
- it will be really help people
- it will help the environment
- we will learn a lot
- there will be some good challenges
- people will be proud of us.

Our capability - We can do it because:

- we have the skill
- we have the experience
- we know where we can get help
- we are willing to learn how to do it
- we don't give up
- we are really good at working together.

Demand - The demand will be good because:

- there are plenty of people who want to contribute to the project
- lots of people will support the project and change their behaviour.

The idea - The idea will work because:

- we have the time to do it
- we can get the resources and equipment we need
- we have the money
- the steps are really clear
- it's really quite easy to do
- it's easy to make sure everyone knows about it
- we're allowed to do this.

3. Check out these websites for project ideas

- Plan a trip to a reserve on public conservation land. This page lists field trip options by region, and offers some advice on what to do at these 'Super Sites' when you are there:
www.doc.govt.nz/fieldtrips
- Mini beast mansion, wooden pallets used in an extraordinary way:
www.bbc.co.uk/breathingplaces/schools/casestudies/sacred_heart.shtml
- Walking the talk, Albany Junior High greens up their stream:
www.emap.rsnz.org/cases-studies/albany-junior-high-school.html
- Use the Weedbusters ID to deal with the weeds in your school:
www.weedbusters.co.nz/weedbusters_in_schools/lesson_plans.asp
- Verran envirokids has fantastic little projects showing real involvement:
www.verranprimary.school.nz/Envirokids.html
- The big clean up is a great chart crammed full with environmental project ideas:
www.arc.govt.nz/albany/fms/main/Documents/Council/Education/the%20big%20clean%20up.pdf

Activity 2: Invite wildlife into the school grounds

Students can invite wildlife into the school grounds using a woodpile to attract insects or some broken concrete to bring in lizards. The action plan in this activity will work for bigger and bolder ideas.

Learning outcomes

Students will:

- draw plans that show they know what native wildlife including invertebrates, birds and lizards need
- recognise by planning a small change, that even very small actions can benefit our native wildlife.

1. Find a place in the school grounds

- Ask students to find possible places in the school grounds that could be a better backyard for the school. It doesn't need to be very big. It could just be behind that old incinerator!
- Decide: Which backyard idea is best? Choose from those found!

2. What do we need to investigate?

a) List the things you will need to find out such as:

- Who is interested? List people who might be interested if you change this little space.
- What do they think? Work out a way to find out!
- Are we allowed? Who do we need to get permission from?

b) Decide: Do we want to change the whole area or start with a little part of it, and then list:

- What needs to go?
- What needs to stay?
- What do birds and mini beasts – such as spiders, moths, beetles, earth worms and stick insects – need? (Eg, food and places to hide!)
- What can we put there that will attract native wildlife?
- Are there any threats to native wildlife like rats and mice?
- How can we get rid of the threats?
- What could the final place look like?

c) Start your plan by listing:

- Where could we start?
- Where could we get the things we need? Who could help us?
- How could we draw up plans?
- How can we show people our ideas?
- Would this cost any money? How can we pay for the things we need?

3. Investigate!

- Students form groups and each group investigates to find solutions to one set of the questions listed under 2. a), 2. b) and 2. c).
- Students “Jigsaw” to form new groups and discuss a new set of questions. Jigsaw is a cooperative learning tool that is a useful way for students to share information or consider solutions to a problem.
 - Each group has different questions to answer.
 - As a group they discuss possible solutions.
 - The group leaders then move to new groups and explain their questions and solutions to a different group of students.
 - Group leaders move around all groups until all students are familiar with the range of questions and solutions.
 - As a class, discuss, add new ideas and list the best solutions found.

4. Draw your solution

- Students draw plans showing what they think the area should look like.
- Draw a master plan as a class.

5. Test it

- Present the master plan to the people you’ve identified as being interested in your plan and ask for their feedback.
- Modify your plans based on their feedback and you’re ready to begin!

Activity 3: Environmentally friendly entrance ways

In this activity students design an entrance way that shows the school's commitment to the environment.

Learning outcomes

Students will:

- work together to form a plan that meets a specific need
- use a strength for the benefit of the group
- cooperate and select to formulate the best possible plan
- consider and use the ideas of others
- recognise and list experts that can help
- investigate, price and source items.

1. Present the idea

- The photo below is of the entrance way to DOC's Taranaki Area Office. Show this photo to students and explain how it reflects the work that DOC does.
- Explain that the school would like an entrance way that reflects the importance of and commitment to the environment.



DOC's Taranaki Area Office, photo: Mike Tapp

2. Set some criteria

Select some of the criteria below or make up your own.

- You must include the school's name in your design and make sure people will see the name clearly from outside the school grounds.
- The entrance way must include a garden area.
- It must show that looking after the environment is important to everyone at your school.
- It must include artwork eg, sculptures and carvings done by students.
- The artwork must be made from recycled materials eg, carvings from fallen punga, old corrugated iron, unused hebel stone for sculptures, corrugated iron sculptures, murals, mosaics, scrap iron sculptures, punga/wire sculptures.

3. Give students a brief

Use this example brief or write your own brief.

- Complete this as a group.
- Draw the landscape plan that shows what you think the entrance way should look like.
- The landscape plan should include front on views, birds-eye views and some close up views showing possible artwork and where you will place these eg, on a fence and as part of the garden.
- Your plan should show the garden area, the plants and anything that you will need to make, such as a retaining wall or fence.
- List local experts that could help you build your entrance way (people we don't need to pay). You may need a mentor for your carvings or corrugated iron sculptures, or someone that knows about retaining walls!
- List the types of artwork you will use so others can see how each piece reflects the environment.

4. Work on draft plans in groups

- Each group presents their ideas to the class.
- As a class, choose and list the best ideas to include in a class plan.
- Form new groups and ask each student to take on one of these roles in their group:
 - Birds eye plan artists – draw and label a big plan to present.
 - Front on artists – draw the front on view.
 - Accountants – work out a budget to go with your plan. For example if you need timber for the retaining wall you will have to find out what to use, how much you need and the cost.
 - Personnel people – list the experts you'll need and find out contact details for those experts.
 - Photographers – prepare a presentation to show what the area looks like now.
 - Gatherers – source the recycled materials and list where they could find them.
 - Model makers – build a model of the entrance.

5. Show your plan to other classes, get their feedback and decide if you want to take the project further. Good luck!

Activity 4: Growing and sharing eco sourced plants

Eco sourcing means sourcing native plants from local seed for local use. In this activity students source the seed and grow some plants at school that are special to their area.

Students offer the plants, and information explaining why the plants are unique, to other schools in their area for those schools to plant in their school gardens.

Learning outcomes

Students will:

- show they know what eco sourcing is by sourcing the seeds from plants that should grow in their area
- demonstrate that they can grow from seed or cuttings by preparing seedling trays
- design a fact sheet or brochure that others can use to find out about a special local plant
- plan an activity together that will eventually see more local plants growing in more areas.

1. Identify the need

Show the following Meet the Locals episodes.

- Project Crimson Kawhia (www.doc.govt.nz/localsprojectcrimson) is about a major tree planting project. Ask your students to watch the episode and work out what the need behind this project is.
- Beetles and Flowers (www.doc.govt.nz/localsbeetlesflowers) is about some tiny and rare alpine plants in the heart of Otago. Ask your students to watch the episode and consider why it's important to find ways of ensuring our special local plants stick around.

2. Investigate!

- Ask students to investigate and find out what eco sourcing is and what it is used for. This is a good place to start: www.arc.govt.nz/environment/plants-and-animals/native-plants/eco-sourcing-native-plants.cfm

3. Study a model

This simple Arbor Day project worked well.

- In 2008 Moturoa School in New Plymouth gathered seed from three rare Taranaki coastal plants and then grew the plants at school.
- From cuttings they grew more and they planted some in coastal gardens around their school.
- Moturoa School sent a newsletter to other schools asking them if they want to take part.
- On Arbor Day (5 June) they offered some of their plants to other coastal schools and these schools made coastal gardens of their own.
- Now these rare coastal plants are growing in more places.

4. Form a plan

Plan a similar project for your class.

- The Trees for Survival project helped Moturoa School get started. Visit their website for ideas www.tfsnz.org.nz.
- Investigate whether your area has plants that need help or even just some that should grow locally.
- Eco source the seeds.
- Grow the plants.
- Publish fact sheets or brochures with information about why these plants are special.
- Offer your plants to other places, eg, schools, early childhood centres and local councils.

Growing and sharing eco sourced plants is a good way to get involved in conservation. Moturoa School gave just 6-9 plants to each school. The plants are low growing and don't take up much space. It really was worth it.

Activity 5: Start recycling at school

In this activity students find out why their school should reduce, reuse and recycle and they form a recycling plan for their school.

Learning outcomes

Students will:

- carry out a waste audit in their own school
- analyse findings from their waste audit
- use the internet to see examples of recycling in other schools
- formulate a recycling plan based on their findings
- present their findings and recycling plan to others.

1. Getting started

Introduce the word *waste*. Waste is anything we throw away but some waste does not have to be rubbish.

2. Show students some photos of landfills



New Plymouth District Council Landfill, photos: Mike Tapp.



New Plymouth District Council Recycling Plant, photo: Mike Tapp.

3. Discuss: what's wrong with landfills?

You can use these ideas to start your discussion.

- There are lots of things in there that we could use again.
- Landfills use up lots of land and we can't build houses or parks there.
- They smell and don't look very pleasant.
- It costs lots of money to get rid of all the rubbish.
- The rubbish stays there for just about forever.
- Bigger towns have to have even bigger landfills.
- Leachate (the liquid that drains or leaches from landfills) from rubbish can seep through the ground and get into water that people drink.
- Horrible and smelly fumes can get into the air.
- When landfills run out of room councils have to build others and use up more good land.

4. Discuss: why do we need to recycle?

In groups students discuss the questions below.

- How can recycling benefit the environment?
- What sorts of things can we use again?
- How can recycling help grow things?
- How can recycling save energy?
- How can recycling save money on waste disposal?
- How can recycling help charities?
- How can recycling help prevent global warming?

4.1 Teacher background for the discussion about why we need to recycle

- **It benefits the environment.** We don't have to do as much mining or tree felling for natural resources. We just use what we already have again. If we recycle instead of using landfills then there will be less harmful gases in the air and less leach from landfills seeping through the earth and into our water supplies.
- **We can use some things again.** Paper, ink cartridges, plastic bags, plastic bottles, newspapers.
- **It can help grow things.** Scraps are broken down into compost. Worm farms use up scraps and worm wee helps plants grow.
- **It can save energy!** We use less energy by recycling what we already have, than when we make new things. That means less power and less water, gas, coal and oil.
- **It can save money on waste disposal.** If we have less waste to get rid of then we spend less money.
- **It can help charities.** Used clothing, furniture and appliances are sold and the money goes to charity.
- **It can help prevent global warming.** Much of the energy needed to make new things burns fossil fuels like gas, oil and coal. These fuels send carbon and other greenhouse gases into the environment. Turning raw materials into something new produces toxic wastes like ammonia, carbon monoxide, methane and sulphur dioxides.

5. What needs investigating?

As a class list some of the things you'll need to find out about waste at the school.

- What sort of waste do we have at our school?
- How is this waste created?
- How can we find out what people do with our school waste now?
- Which sort and how much of this waste can we reduce, reuse or recycle?
- What is the easiest way to collect the different types of school waste every day?
- Do we have to do anything special to the waste we want to reuse or recycle?
- Where can we keep everything before it is recycled?
- How can we get the rest of the school to reduce, reuse and recycle?
- Who needs to know about our plans?

6. Investigate!

- Do a waste audit by finding out where the school waste is, deciding what sort of waste it is and completing a table like the one below.

	Classroom	Staffroom	School office	Places where people eat lunch	Library	Toilets	Principal's office
Paper							
Card							
Glass							
Plastic							
Cans							
Other metals							
Wood							
Food waste							
Garden waste							
Other							

- Next find out what happens to the school waste now and complete a table like the one below.

	We collect and recycle this waste.	We compost this waste.	This waste just goes in the rubbish and then to landfills.
Paper			
Cardboard			
Glass			
Plastic			
Cans			
Other metals			
Wood			
Food waste			
Garden waste			
Other			

- Analyse the findings from your waste audit and decide how you could collect things differently.
- Now look at ways other schools have done this.
 - This school recycles plastics: www.gw.govt.nz/story23396.cfm
 - This school recycles paper: www.gw.govt.nz/story23351.cfm
 - These schools are recycling all sorts of waste: www.wastenet.org.nz/icc/wastenet/take-action/schools/case-studies.cfm

7. Make up your own recycling plan

- You need places to collect from and things to collect in.
- Recycled and reused waste needs a place to go.

8. Present and test

- Show people at your school what you have found out about your school waste.
- Tell them why your school should reduce, reuse and recycle.
- Show everyone your recycling plan and if they think it is a good idea, then begin!