



Learning Through Action

Environmental LEOTC Education Programmes for Schools 2015



**Ko tōku
ao, ko tō ao**
“My world is your world”

There's no substitute for real world experience.

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Learning Through Action

ENVIRONMENTAL LEOTC EDUCATION PROGRAMMES FOR SCHOOLS

The Christchurch City Council offers a range of environmental and city infrastructure programmes that are free to schools. These programmes provide relevant and authentic learning experiences through hands on activities.

Learning areas covered in the programmes:

- Conservation of water
- Ecosystems
- Sustainability of resources
- Organic waste cycle
- Biodiversity
- Impact of pests
- Geology
- Outdoor survival
- Waste management
- Native trees and plants

As the programmes are experiential and interactive we encourage students to be immersed in the unique environments when participating in the programmes. We are supportive of students and teachers using cameras, iPhones and tablets to record any findings resulting from their learning, however we ask that the delivery of the lesson by Environmental Teachers and Rangers or resources are not digitally recorded.

This booklet briefly describes programmes available to teachers in Christchurch.

For details of programmes including programme outlines, links to the NZ Curriculum and RAMS please visit the Christchurch City Council's Learning Through Action website: www.ccc.govt.nz/learningthroughaction

Programmes cater for students from new entrants to year 13. Learning Through Action Programmes are supported by the Ministry of Education – The Christchurch City Council Education Team is a Learning Experiences Outside The Classroom (LEOTC) provider.

CIVIL DEFENCE EMERGENCY MANAGEMENT (CDEM) EDUCATION PROGRAMMES FOR PRIMARY SCHOOLS

The Christchurch City Council also offers free Civil Defence Programmes to schools, concentrating on disaster awareness and preparedness; including reduction, readiness, response and recovery. These programmes are run in classrooms at your school so are not part of the LEOTC programmes.

BOOKINGS

To book any of the programmes in this booklet please fill in a separate form for each class you are booking. Book online at: www.ccc.govt.nz/learningthroughaction/booking



Beach and Shore Habitats

COASTAL MANAGEMENT – *Taku tai, takutai*

Students will have the opportunity to explore the coastal environment while examining the issues on the hot topic of coastal management. They will also explore the issue of coastal erosion – through natural processes and human interference. With the Coastal Park Rangers, students build their own beach profile discovering different coastal management techniques.



Year level:	11–13
Curriculum level:	5–8
Availability:	Available year round
Times:	To be arranged with Ranger (duration 2.5–3 hours)
Site:	Spencer Park Beach, Waimairi Beach, North Brighton Beach, New Brighton Beach and South Brighton Beach
Cost:	Free
Number of students:	Maximum of 35 students

SAVING THE SAND DUNES – *Kia ora ai a tāhuahua*

In this programme students build their own mini sand dunes to understand the secret behind them and how they work to protect the coastal environment.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round (tide dependent)
Times:	9.30–11.30am or 12.30–2.30pm
Site:	Spencer Park Beach, Waimairi Beach, North Brighton Beach, New Brighton Beach, South Brighton Beach and Sumner Beach
Cost:	Free
Number of students:	Maximum of 35 students

SEARCHING THE SHORELINE – *Te ara rau o Tangaroa*

What's on the beach? What gets washed up and what shouldn't be there? This is a chance for students to investigate objects on the beach – natural and unnatural – and identify ways that they can contribute to sustainable coastal areas.



Year level:	Year 0–4
Curriculum level:	1–3
Availability:	Available year round (tide dependent)
Times:	9.30–11.30am or 12.30–2.30pm
Site:	Spencer Park Beach, Waimairi Beach, North Brighton Beach, New Brighton Beach, South Brighton Beach and Sumner Beach
Cost:	Free
Number of students:	Maximum of 35 students

Biodiversity

CREATIVE AND NATIVE – *He rerehua, he taketake*

In the Botanic Gardens, students explore scientific terms around the life and origin status of New Zealand biodiversity before investigating how and drawing conclusions as to why our biodiversity has changed over time. Students become a flock of migratory birds to consider the challenge facing the sustainability of natural habitats and identify a selection of native trees and plants.



Year level:	Year 5–8
Curriculum level:	2–4
Availability:	All year round
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Christchurch Botanic Gardens
Cost:	Free
Number of students:	Maximum of 35 students

FOREST SURVIVOR – *He uri a Tāne*

Students will identify organisms making their homes in the exotic forest environment. They will learn about safety in the outdoors, including how to build a bivouac shelter out of fallen materials.

Adventurous students will have the opportunity to try a squirmy huhu grub, learning the importance of using wild food for survival.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30–11.45am or 12.30–2.30pm
Site:	Bottle Lake Forest Park or Spencer Park
Cost:	Free
Number of students:	Maximum of 35 students

FRESHWATER FROLICKING – *Te whawhawhwe ki rō waimāori*

At the Groynes or Styx Mill Conservation Reserve, students identify a range of stream invertebrates and explore the wider food chains and life cycles. They then consider the importance of our biodiversity eating nutritionally and appropriately, as well as investigating the impact of human choices on the sustainability of the ecosystem.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30–11.45am or 12.30–2.30pm (The Groynes) 9.30am–12noon or 12.15–2.30pm (Styx Mill)
Site:	The Groynes or Styx Mill Conservation Reserve
Cost:	Free
Number of students:	Maximum of 35 students

Biodiversity

JUNIOR PARK EXPLORERS – *Ngā Kairangahau Paaka*

The regional parks come alive as students awaken their senses to explore the awe and wonder of the natural world. They learn to listen to different bird calls, feel the different parts of a tree and see mini-beasts in their local habitat. Through these activities, students understand how birds, trees and insects are all connected.



Year level:	New entrant – Year 2
Curriculum level:	1–2
Availability:	Available year round, predominantly in Terms One and Four
Times:	9.30–11.45pm or 12.15–2.30pm
Site:	Your local regional park: The Groynes, the Botanic Gardens, Halswell Quarry, Victoria Park and Spencer Park
Cost:	Free
Number of students:	Minimum of 18 and a maximum of 30 students

NATIVE NURTURING – *Manaaki Whenua*

Through historical accounts and a multi-sensory walk on the Port Hills, students discover and consider the different values associated with two contrasting landscapes – Podocarp forest and tussock grassland. They are encouraged to engage with sustainability issues around our native forests, particularly in terms of the impact of pests.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30–12noon or 12.15–2.30pm
Site:	Victoria Park, Port Hills
Cost:	Free
Number of students:	Maximum of 35 students

PARK DETECTIVES – *Titeketiwhi Paaka*

Students will build on their knowledge from Junior Park Explorers and further develop their detective skills in learning why our local green spaces are so important to our lives as humans. Hands on activities enable them to describe the key roles in these perfectly balanced ecosystems, before students engage in a problem-solving process and use this learning to propose action for the future!



Year level:	Year 3–5
Curriculum level:	1–4
Availability:	Available year round, predominantly in terms One and Four
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Christchurch Botanic Gardens
Cost:	Free
Number of students:	Maximum of 35 students

Biodiversity

WETLANDS, WADERS AND WATER BOATMEN – *Ngā kaitia, ngā kaikauhoe me ngā kūkūtai*

Take a trip to Travis Wetland - Christchurch's largest freshwater wetland and an important habitat for native wetland plants and birds. Students learn about the biodiversity of the wetland, go pond-dipping to discover the underwater species, and get behind a pair of binoculars to observe the variety of bird life.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Travis Wetland
Cost:	Free
Number of students:	Maximum of 35 students
Requirements:	In wet conditions, gumboots are recommended

City Water and Waste

ALL FLUSHED OUT – *Heketua, heke ki whea*

Our wastewater is carried through a network of underground pipes and pumps to the Christchurch Wastewater Treatment Plant. At this facility students will discover what happens to anything that goes down the drain. Be prepared for a revival of your senses - this is a smelly one.



Year level:	Year 5–13
Curriculum level:	2–8
Availability:	All year round
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Christchurch Wastewater Treatment Plant
Cost:	Free
Number of students:	Maximum of 35 students
Requirements:	Closed in shoes must be worn

Please note special adult:student ratios on our website

City Water and Waste

A WASTE OF TIME – *Hangaruatia*

Students will gain an insight into the reduce, reuse and recycle aspects of the waste management hierarchy.

This is highlighted by visits to:

EcoSort — Students will investigate the importance of reducing over recycling before exploring how the Materials Recovery Facility (MRF) separates the resources from the recycling (yellow top) wheelie bins, then explore what products these resources can be recycled into.

EcoDrop — A quick drive past the recycling drop off area to identify resources that can be dropped off for reuse and recycling that are not part of the Kerbside collection.

EcoShop — A leap into the future as students are invited to imagine they are moving into a new flat, so need to decide which items they would purchase with their designated budget. This activity reinforces the concept of reuse.



Year level:	Year 5–13
Curriculum level:	2–8
Availability:	All year round
Times:	9.15–11.45am or 12.15–2.30pm
Site:	EcoSort (Parkhouse Road Materials Recovery Facility - MRF), EcoDrop Parkhouse (EcoDepot/Refuse Station) and EcoShop
Cost:	Free
Number of students:	Maximum of 35 students
Requirements:	Closed in shoes must be worn

CASTING MAGIC WITH WORMS – *Noke, noke, neke, neke, nuku, nuku, nā!*

Even worms are doing their thing for the environment! A programme aimed at junior students to discover the important role worms can play in our waste management system. Students search the area for worms and create their own mini worm farm to take back to school.



Year level:	Year 0–4
Curriculum level:	1–2
Availability:	All year round
Times:	9.30–11.30am or 12.30–2.30pm
Sites:	EcoDepot/EcoDrop, Metro Place or Curators House, Botanic Gardens
Cost:	Free
Number of students:	Maximum of 30 students
Requirements:	Each student needs to bring a 1.5 litre plastic bottle ready for reusing. Closed in shoes must be worn.

City Water and Waste

FERTILISING FOR THE FUTURE – *Ka whakatō te wairākau mō āpōpō*

Students learn the science behind reducing and utilising organic waste as a resource by turning it into natural fertilisers.

For year levels 4–8 students investigate the methods of hot heap composting and vermicompost. Students will layer ingredients in a bin to make hot compost and learn how to maintain a worm farm and harvest vermicompost and liquid fertiliser.

For year levels 9–13 students learn the method of hot heap composting and investigate the anaerobic fermentation of food scraps using EM Bokashi.



Year level:	4–13
Curriculum level:	2–8
Availability:	All year round
Times:	9.15–11.45am or 12.15–2.30pm
Site:	Christchurch Botanic Gardens
Cost:	Free
Number of students:	Maximum of 35 students

WATER FOR LIFE – *Te wai ora o Tāne*

Students learn how to be waterwise! At one of Christchurch’s water pumping stations, students investigate the importance of valuing water as a precious resource. They compare water use around the world and view the various pump station components. The programme finishes with a range of problem solving and reinforcement activities. Students can continue their learning at school with a Christchurch City Council water diary and mathematical challenge.



Year level:	5–8
Curriculum level:	2–5
Availability:	All year round
Times:	9.30–12noon or 12.15–2.30pm
Site:	Main Water Pumping Station, Colombo Street
Cost:	Free
Number of students:	Maximum of 35 students

Geology

ROCKY ROAD OF DISCOVERY – *Te ara werowero ki Ō māramatanga*

Students will discover the working history of the Quarry and investigate the different geological rock types found around the site. They will explore how the Quarry has been transformed into a regional park catering for recreational activities, alongside sustaining natural environments for native species and showcasing the multi-cultural nature of Christchurch today through Sister City gardens.



Year level:	3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Halswell Quarry Park
Cost:	Free
Number of students:	Maximum of 35 students

Waterways and Wetlands

FRESHWATER FROLICKING – *Te whawhewahwe ki rō waimāori*

At the Groynes or Styx Mill Conservation Reserve, students identify a range of stream invertebrates and explore the wider food chains and life cycles. They then consider the importance of our biodiversity eating nutritionally and appropriately, as well as investigating the impact of human choices on the sustainability of the ecosystem.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30–11.45am or 12.30–2.30pm (The Groynes) 9.30am–12noon or 12.15–2.30pm (Styx Mill)
Site:	The Groynes or Styx Mill Conservation Reserve
Cost:	Free
Number of students:	Maximum of 35 students

WETLANDS, WADERS AND WATER BOATMEN – *Ngā kaitia, ngā kaikauhoe me ngā kūkūtai*

Take a trip to Travis Wetland - Christchurch's largest freshwater wetland and an important habitat for native wetland plants and birds. Students learn about the biodiversity of the wetland, go pond-dipping to discover the underwater species, and get behind a pair of binoculars to observe the variety of bird life.



Year level:	Year 3–8
Curriculum level:	1–4
Availability:	Available year round
Times:	9.30am–12noon or 12.15–2.30pm
Site:	Travis Wetland
Cost:	Free
Number of students:	Maximum of 35 students
Requirements:	In wet conditions, gumboots are recommended

Adult: Student Ratios by Programme and Year Level Grouping

Learning Through Action Programme	Year Levels Attending				
	Years 1–3	Years 4–6	Years 7–8	Years 9–10	Year 11+
Coastal Management	N/A	N/A	N/A	1:10	1:15
Creative and Native	N/A	1:7 <i>(Years 5–6 only)</i>	1:9	N/A	N/A
Forest Survivor	1:5 <i>(Year 3 only)</i>	1:6	1:8	N/A	N/A
Freshwater Frolicking	1:5 <i>(Year 3 only)</i>	1:5	1:7	N/A	N/A
Junior Park Explorers	1:5 <i>(Years 0–2 only)</i>	N/A	N/A	N/A	N/A
Native Nurturing	1:6 <i>(Year 3 only)</i>	1:7	1:8	N/A	N/A
Saving the Sand Dunes	1:6 <i>(Year 3 only)</i>	1:6	1:8	N/A	N/A
Searching the Shoreline	1:5	1:6 <i>(Year 4 only)</i>	N/A	N/A	N/A
Rocky Road of Discovery	1:5 <i>(Year 3 only)</i>	1:6	1:8	N/A	N/A
Wetlands, Waders and Water Boatmen	1:5 <i>(Year 3 only)</i>	1:5	1:7	N/A	N/A
All Flushed Out	N/A	1:5 <i>(Year 5–6 only)</i>	1:6	1:8	1:10
Fertilising for the Future	N/A	1:6	1:8	1:10	1:15
A Waste of Time	N/A	1:6 <i>(Year 5–6 only)</i>	1:8	1:10	1:15
Casting Magic with Worms	1:5	1:6 <i>(Year 4 only)</i>	N/A	N/A	N/A
Water for Life	N/A	1:8	1:9	1:10	1:15
Park Detectives	1:5 <i>(Year 3 only)</i>	1:6 <i>(Year 4–5 only)</i>	N/A	N/A	N/A

Environmental Calendar of Events

FEBRUARY	MARCH	APRIL
<ul style="list-style-type: none"> - World Wetland Day - National Bike Week 	<ul style="list-style-type: none"> - International Day of Forests and the Tree - Seaweed - World Water Day - World Meteorological Day 	<ul style="list-style-type: none"> - World Health Day - International Mother Earth Day - UN Global Road Safety Week
MAY	JUNE	JULY
<ul style="list-style-type: none"> - World Migratory Bird Day - International Day for Biological Diversity 	<ul style="list-style-type: none"> - World Environment Day - Arbor Day - World Oceans Day - World Day to Combat Desertification and Drought 	<ul style="list-style-type: none"> - World Population Day
AUGUST	SEPTEMBER	OCTOBER
<ul style="list-style-type: none"> - Conservation Week 	<ul style="list-style-type: none"> - International Day of Peace - International Day for the Preservation of the Ozone Layer - Clean up the World - Keep New Zealand Beautiful Week - World Maritime Day 	<ul style="list-style-type: none"> - World Habitat Day - Heritage Week - World Disaster Reduction Campaign - Get Ready Week - World Food Day - International Day for the Eradication of Poverty - World Rainforest Week
NOVEMBER	DECEMBER	
<ul style="list-style-type: none"> - International Buy Nothing Day - World Toilet Day 	<ul style="list-style-type: none"> - International Biodiversity Day 	

2005–2015 International Decade for Action 'Water for Life'

2011–2020 United Nations Decade on Biodiversity

2014–2024 United Nations Decade of Sustainable Energy for all

UNITED NATIONS OBSERVANCES

- www.un.org/en/events/observances/days
- www.un.org/en/events/observances/weeks
- www.un.org/en/events/observances/years
- www.un.org/en/events/observances/decades

Programme Location Map

Learning Through Action programmes are available at the following sites:



More Information

For more information regarding the content of our programmes:

- Phone (03) 941 8999
- Email educationeg@ccc.govt.nz

To book a programme fill in a separate form for each class you are booking
www.ccc.govt.nz/learningthroughaction/booking

Civil Defence Emergency Management (CDEM)

EDUCATION PROGRAMME - STAN'S GOT A PLAN

Here in Christchurch we are all too aware of natural disasters. We know what do to in the event of an earthquake, but that's not the only disaster that we need to be prepared for. The Christchurch City Council provides an education programme called 'Stan's Got a Plan' to supplement the delivery of Civil Defence Emergency Management education in the classroom.

The programmes focus on one of the following events most likely to occur in Canterbury:

- Earthquakes
- Flooding
- Pandemic
- Tsunami
- Storms

Programmes are tailored specifically to the age of the students and are delivered in a sensitive and caring manner. The purpose of the programmes is to educate children so that they feel empowered, not scared.

Programmes are FREE of charge and are offered at junior (years 1–3), middle (years 4–6) and senior levels (years 7 and 8).

For more information regarding content of Civil Defence Emergency Management programmes:

- Phone (03) 941 8999
- Email educationceg@ccc.govt.nz
- www.ccc.govt.nz/stansgotaplan

To make a booking, fill in a separate online booking form for each class you are booking www.ccc.govt.nz/learningthroughaction/booking



Other Programmes Available



Cycle Safe is a programme for schools targeting year six students. Children learn to ride their cycle with confidence and be road-wise. The programme includes cycle maintenance, correct fitting of helmets, basic and on road cycling skills.

All students receive a personal certificate detailing their achievements at the end of the programme. The Programme is aligned with NZ Transport Agency's national cyclist skills training guidelines.

Contact the Community Education Coordinator

- Phone (03) 941 8999
- Email cyclesafe@ccc.govt.nz
- www.ccc.govt.nz/cyclesafe



Crash Bash is an educational road safety programme for secondary school students organised by the Christchurch City Council and partly funded by the New Zealand Transport Agency (NZTA).

The Crash Bash programme uses a creative stage performance to raise awareness among students about thinking and planning ahead to make safe decisions and choices around driving, alcohol and their peers. The show is performed by graduates from the National Academy of Singing and Dramatic Art (NASDA). The show tours Christchurch secondary schools annually during term one.

Community Travel Advisor

- Phone 03 941 8999
- Email crashbash@ccc.govt.nz
- www.crashbash.co.nz



The Council works with schools on developing travel plans that promote safer and more sustainable travel options for school related journeys.

School Travel Planning can be used to address congestion at the school gate and other road safety issues for children. It helps promote healthy and active lifestyles for children, and supports such values identified in the New Zealand curriculum as community and participation and ecological sustainability.

Contact the Road Safety Co-ordinator

- Phone (03) 941 8999
- Email rsc@ccc.govt.nz
- www.ccc.govt.nz/schooltravelplans



www.ccc.govt.nz/learningthroughaction

Christchurch City Council

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