MARLBOROUGH CONSERVATION EDUCATION TOOLBOX

A resource developed by the Department of Conservation in conjunction with community conservation groups



Revised September 2022



CONTENTS

INTRODUCTION	4	LOCHMARA LODGE	16
		Project summary	16
CURRICULAR LINKS	5	Education programmes	16
		The Underwater Observatory Tour	16
CLIMATE KARANGA MARLBOROUGH	7	The Conservation Tour	17
Project summary	7	Best of sea and land	17
Education programmes	7	Explore Lochmara	17
Solar Oven Project	7		
'Threatened Species' Treasure Hunt		MARLBOURH DISTRICT COUNCIL	18
'Ocean acidification' quiz	8	Project summary	18
		Education programmes	18
DEPARTMENT OF CONSERVATION		Enviroschools	18
Project summary	9	Kids Edible Gardens	18
DOC National resources		Individual Environmental Education Lessons	19
DOC Local field trip resources	9		
DOC Resource kits	9	KĀREAREA, FALCONS IN MARLBOROUGH	20
Meretoto/Ship Cove field trip	9	Project summary	20
Momorangi field trip	10	Education programmes	20
Pelorus Bridge field trip	10	Classroom visit	20
Pine Valley/Mill Flat field trip	10	Aviary visit	20
Te Koko-o-Kupe/Cloudy Bay field trip	10		
ENVIROHUB MARLBOROUGH & CONSERVATION	ON	MARLBOROUGH LINES HERITAGE EDUCATION PROGRAMME	
KIDS NZ		Project summary	21
Project summary	11	Education programmes	21
Conservation Kids NZ Branches	11		
Marlborough Conservation Kids	11	MISTLETOE BAY ECO VILLAGE	22
Pelorus Conservation Kids	11	Project summary	22
Education programmes	12	Education programmes	22
Regular Conservation Kids NZ events	12	The Mistletoe experience	22
Save our species programme	12	Marine studies with NZ Marine Studies Centr	e 22
Picton Environment Centre	12		
		NZ MARINE STUDIES CENTRE	23
KAIPUPU SANCTUARY	13	Project summary	23
Project summary	13	Education programmes	23
Education programmes	13	1. Primary Programmes	23
Education at Kaipupu	13	2. Secondary Programmes	23
Surf to Turf – Educational Trip	14	Voyage of Discovery with Steadfast	23
KORU NATIVE WILDLIFE CENTRE	15	PICTON DAWN CHORUS	24
Project summary	15	Project summary	24
		Education programmes	24

Trapping in action24	ŀ
Make your own trap24	ŀ
PINE VALLEY OUTDOOR CENTRE25	5
Project summary25	,
Education programmes25	,
Pine Valley activities25	
Pine Valley/Mill Flat DOC field trip resources 25	5
TE HOIERE/PELORUS BAT RECOVERY PROJECT 26)
Project summary26)
Education programme26)
Long-tailed bat viewing26	5

TE WHANAU HOU GROVETOWN LAGOON	27
Project summary2	27
Education programmes	27
Grovetown lagoon scavenger hunt	27
Wetland warriors	27
TOYOTA KIWI GUARDIANS	28
Project summary2	28
Education programmes	28
Toyota Kiwi Guardians for schools and groups 2	28
Marlborough adventure locations	28
INDEX: FOCUSES AND STRENGTHS OF OUR	
CONSERVATION EDUCATORS	29





INTRODUCTION

Conservation education

Conservation education aims to increase the value of outdoor learning and conservation to New Zealanders. Our young people are the next generation of advocates and decision makers, so it is essential we connect them to nature. Effective conservation, delivered through schools, will foster a life-long commitment to conservation, from children and their parents.

Community conservation education in Marlborough

Marlborough has many educators within community groups and agencies who can provide conservation education and experiences to schools. The various groups focus on a range of habitats, species and conservation actions.

Using conservation groups to support school programmes has many benefits:

- Opportunities to participate in real-life, hands-on conservation actions, such as trapping, pest monitoring and planting.
- Exposure to the work of community groups sends the inspirational message that everyone can positively influence and contribute to conservation in their communities.
- Opportunities for students to learn about and participate in collaborative projects and find their place in the environment and community.
- Exposure to different perspectives; students can develop their problem-solving and critical-thinking skills.
- Students can develop empathy and personal responsibility, while increasing their awareness of the environment.
- Teachers can incorporate conservation education into standard curricular requirements such as maths, English and science.

Marlborough Conservation Education Toolbox

The Marlborough Conservation Education Toolbox contains information and links to a large selection of activities and teaching resources. The <u>Curricular Links table</u> provides an overview of how they can be incorporated into your school curriculum.

The conservation groups involved are committed to upskilling and being relevant to Marlborough schools. We welcome feedback on the toolbox or school programmes; contact the Picton Community Ranger at picton@doc.govt.nz.





CURRICULAR LINKS

Using physics	Physical concepts	Physical inquiry	Physical world	Astronomical systems	Interacting systems	Earth systems	Planet Earth and beyond	Evolution	Ecology	Life processes	Living world	Participating and contributing	Communicating in science	Investigating in science	Understanding about science	Nature of science	
	K	K		Ч	K	K						K	K	K	K		Climate Karanga Marlborough
									K	K		\forall		K			Department of Conservation
								\forall	\forall	K		\forall			\forall		Envirohub & Conservation Kids
								\forall	K	K				K	K		Kaipupu Sanctuary
					K			\forall	K	K							Koru Native Wildlife Centre
	K	К						\forall	K	K		\forall	\forall	K	K		Lochmara Lodge
	K				K	Y			K	\forall		K		\forall	K		Marlborough District Council Education Programmes
								K	Ч	K		K					Marlborough Falcon Conservation Trust
												K			\forall		Marlborough Lines Heritage Education Programme
													K	\forall	\forall		Mistletoe Bay Eco Village
					\forall			×	K	K		Y	\forall	\forall	\forall		NZ Marine Studies Centre
								×	K	K							Pelorus Bat Recovery Project
								K	Ч	K		K					Picton Dawn Chorus
									K			K		K			Pine Valley Outdoor Centre
									Ч			K					Te Whanau Hou Grovetown Lagoon
									К			K		К			Toyota Kiwi Guardians

Speaking, writing and presenting	Listening, reading and viewing	English	Healthy communities and environments	Relationships with other people	Movement concepts and motor skills	Personal health and physical development	Health and physical education	Statistics	Geometry and measurement	Numbers and algebra	Mathematics and systematics	The economic world	Continuity and change	Place and environment	Identity, culture and organisation	Social science	Chemistry and society	The structure of matter	Properties and changes of matter	Material world	
K	K		Y	\forall				Y		K											Climate Karanga Marlborough
Y	\forall		Y					Y						K							Department of Conservation
K	K		\forall	K									\forall	K							Envirohub & Conservation Kids
K	K			K					K					K	\forall						Kaipupu Sanctuary
																					Koru Native Wildlife Centre
K	K		\forall									K	\forall	K							Lochmara Lodge
K	K		K					K	K			K	K	K	K		K		K		Marlborough District Council Education Programmes
Y	K		У											Y	K						Marlborough Falcon Conservation Trust
Y	K												K	K	K						Marlborough Lines Heritage Education Programme
			\forall	K		К							К	K	\forall						Mistletoe Bay Eco Village
	K		\forall					Y				Y	K	K	K						NZ Marine Studies Centre
																					Pelorus Bat Recovery Project
			Y										K	K							Picton Dawn Chorus
			K	K	K	K								K							Pine Valley Outdoor Centre
			Y											K							Te Whanau Hou Grovetown Lagoon
			Y		K	K								K							Toyota Kiwi Guardians



CLIMATE KARANGA MARLBOROUGH

Project summary

Climate Karanga Marlborough (CKM) was formed in 2015 by a group of local people concerned about climate change. It aims to increase awareness and action at local and national levels. CKM's education programmes aim to advise, help and inspire New Zealanders to take responsibility for their actions, to invest in the future of our planet.

Education programmes

Designed to link classroom learning to the Earth Day party (celebrated for the first time in Marlborough in 2017), the programme could, however, stand alone. CKM is planning to make Earth Day an annual celebration to be held in conjunction with the Global March for Science on or around 22 April and is keen to involve young people and families.

The programme would help develop students' understanding of a range of science concepts, particularly reflection, absorption, convection, radiation and insulation, and raise their awareness and understanding of renewable energy and its importance to the wellbeing of our planet. The programme would also provide opportunities to link to other community groups involved in Earth Day.

Solar Oven Project

With this project, students carry out classroom-based preparatory activities then construct and test solar ovens. The programme develops students' understanding of science concepts, particularly reflection, absorption, convection, radiation and insulation and of renewable energy and its importance to our planet's wellbeing. Solar ovens can be made of common materials, making this a cheap activity to run.

Location and setting: Indoor (classroom) and outdoors (such as school grounds)

Cost: Small expenditure on items such as cardboard boxes, construction paper, aluminium foil, glue and tape. Other items such as rulers, scissors and baking tins are readily available.

Age: 8-12 years

Availability: February – April (to coincide with Earth Day)

'Threatened Species' Treasure Hunt

This outdoor 'information treasure hunt' activity is based on 25 posters (distributed by The Global Education Project – www.theglobaleducationrpoject.org) of animals at risk from climate change. Students learn about animals around the world that are threatened or have been made extinct by climate change, the climate change processes responsible for this threat, and the animals' characteristics that make them susceptible to climate change.

Location and setting: Indoor (classroom) and outdoors (such as school grounds)

Cost: Small expenditure on items such as cardboard boxes, construction paper, aluminium foil, glue and tape. Other items such as rulers, scissors and baking tins are readily available.

Age: 8-12 years

Availability: February – April (to coincide with Earth Day)

'Ocean acidification' quiz

This quiz deals with iconic species like snapper, green shell mussel and pāua. Students learn about New Zealand's sea life that is threatened by ocean acidification (due to the rising levels of atmospheric carbon dioxide) and the research programmes studying this.

Location and setting: Indoor (classroom) and outdoors (such as school grounds)

Cost: Small expenditure on items such as cardboard boxes, construction paper, aluminium foil, glue and tape. Other items such as rulers, scissors and baking tins are readily available.

Age: 8-12 years

Availability: February – April (to coincide with Earth Day)

Further information: Tom Powell, tomspowell@hotmail.com, 027 244 7362



Tom Powell – Secretary and co-chair of Climate Karanga Marlborough





DEPARTMENT OF CONSERVATION

Project summary

DOC is the government agency in charge of conserving New Zealand's natural and historic heritage. Our conservation lands and waters, and the ecosystems and species they protect, give us a sense of national identity and pride. Our conservation education objective is to equip young New Zealanders and teachers with knowledge, values and skills to support, develop and sustain their conservation actions.

We organise our work around five outcomes:

- More people engage with conservation and value its benefits
- More diversity of our natural heritage is maintained and restored
- Our history is protected and brought to life
- More people participate in recreation in nature
- Conservation gains from more business partnerships

DOC National resources

DOC has developed a series of high-quality education resources for activities that can easily be led by teachers.



Junior Explorer Kit



Outdoor Education Kit



Guardian Kit

The resources allow students to undertake some initial enquiry-based learnings in the classroom, reinforced with a field trip and followed by post-trip activities that are often inspired to be action-based. These activities can be undertaken at almost any site or in the classroom, and they may complement programmes offered by other groups.

 $\textbf{Location and setting:} \ \mathsf{Online} \ \mathsf{resources} \ \mathsf{to} \ \mathsf{be}$

used in the classroom and outdoors

Cost: Free

Age: Pre-school and primary school

Availability: All year

Link to the resources: www.doc.govt.nz/get-

involved/conservation-education/

DOC Local field trip resources DOC Resource kits

Please contact your local DOC office to borrow a resource kit to use on a local field trip. We also have online teaching resources to accompany field trips to various Marlborough locations:

Meretoto/Ship Cove field trip

Students can learn about Meretoto/Ship Cove – Captain James Cook's favourite place in the Marlborough Sounds, and how New Zealand's plants and wildlife live on Motuara Island.

Teaching resource:

https://www.doc.govt.nz/getinvolved/conservationeducation/resources/local-fieldtrips/marlborough/ship-cove-and-motuaraisland/

Momorangi field trip

Thanks to sponsorship from Kathmandu, education activities and resource kits have been developed for Momorangi campground. This site is ideal for groups who want to study the marine or freshwater environments and learn about a regenerating forest ecosystem and conservation techniques. There are three resource kits that each come with activity instructions and the required equipment:

- Marine resource kit
- Freshwater resource kit
- Forest resource kit

The Momorangi field trip information gives teachers guidance in planning their trip, running activities and the resources available.

These resources can be used either on a day visit or overnight camping experience. We also have tents, sleeping mats, TV/DVD and a whiteboard on site for schools to use.

Location and setting: Momorangi Bay campground (outdoor activities) and classroom activities

Time: Minimum 2 hours, up to 2 days

Cost: Camping fees will apply for overnight trips;

however, resources are free to use **Age:** Pre-school and primary school **Availability:** March to December

Teaching resource: http://www.doc.govt.nz/get-

involved/conservation-

education/resources/local-field-trips/marlborough/momorangi-field-tripresource/



DOC Momorangi Field Trip

Pelorus Bridge field trip

Pelorus Bridge Scenic Reserve is one of the most accessible examples of mature native forest in the region. This site is ideal for schools who want to study birds, bats, pests, rivers and native forest ecosystems.

Teaching resource:

https://www.doc.govt.nz/getinvolved/conservationeducation/resources/local-fieldtrips/marlborough/pelorus-bridge/

Pine Valley/Mill Flat field trip

This site is ideal for groups who want to study the bush and/or freshwater environment. These resources can be used on a half-day trip while staying at the Pine Valley camping ground.

Location and setting: Mill Flat, Pine Valley – North Bank (outdoor activities) and classroom activities

Time: Minimum 2 hours

Cost: Free

Age: Pre-school and primary school **Availability:** March to December

Teaching resource:

https://www.doc.govt.nz/getinvolved/conservationeducation/resources/local-fieldtrips/marlborough/mill-flat-field-trip/

Te Koko-o-Kupe/Cloudy Bay field trip

Students can discover some of nature's secrets on the beaches of Te Koko-o-Kupe/Cloudy Bay. The teaching resource provides activities for students focussing on three themes developed for a trip to Cloudy Bay: biological detective work, marine debris and impact of development.

Teaching resource:

https://www.doc.govt.nz/getinvolved/conservationeducation/resources/local-fieldtrips/marlborough/cloudy-bay/







ENVIROHUB MARLBOROUGH & CONSERVATION KIDS NZ

Project summary

Envirohub Marlborough is an Environmental hub that unites, inspires and assists the Marlborough Community to achieve their environmental goals. Our vision is to help build a community focused on sustainability, working together to enhance and protect our Marlborough Environment. One of our key areas at Envirohub is Conservation Kids NZ.

Conservation Kids NZ (CKNZ) is a successful family programme, and our mission is to inspire the young minds of New Zealand to take action for conservation! We promote whānau togetherness and individual tamariki attending our educational events and programmes. Our aim is to provide every child in Marlborough the opportunity to experience not only our unique local marine environment, but to experience all our wider outdoor environments. The CKNZ educational efforts are also designed to complement environmental education and opportunities that are offered during school hours.

Through connections and collaborations with local environmental groups, organisations, and businesses, we aim to collectively deliver monthly events and activities. These events are tamarikiand whānau-based, raising awareness about our local environment and empowering children to take action for its future.

Conservation Kids NZ Branches



Marlborough Conservation Kids

Based out of Picton, in the heart of the beautiful Marlborough Sounds, Marlborough Conservation Kids partners with some amazing local organisations to give every child in Marlborough the opportunity to experience our local environments, both land and sea. Events and activities bring our whānau together to learn more about our local natural world and how we can look after it.



Pelorus Conservation Kids

Based out of the Te Hoiere/Pelorus area, Pelorus Conservation Kids has a special connection to our native bush and a conservation restoration focus. Working alongside the Te Hoiere Restoration Project, CKNZ Pelorus helps run regular events, often based around stream health and restorative planting on local farms.

Education programmes

Regular Conservation Kids NZ events

With the aim of conducting conservation and environment-based education and engagement with both tamariki and whānau, CKNZ runs regular events throughout the year – usually once a month on weekends or during the school holidays. CKNZ also often runs a school holiday programme at certain times of the year. Join in the fun and education by keeping an eye on upcoming events by joining our Facebook page.

Location and setting: Varied indoor and outdoor

activities on land and sea

Cost: Free

Age: 5-12 years of age ideal

Availability: All year **Further information:**

www.envirohub/conservation-kids-nz or www.facebook.com/conservationkids.

Save our species programme

The 'Save our species' programme is an online resource that is free to access by all. Here you can find information and resources on many different NZ species and even conservation topics like recycling. These resource pages follow the same layout as our physical events, allowing you to access all the information you would if you were actually attending an event. The resources are co-developed alongside local organisations who specialise in each specific species. This resource supports our in-person events, while providing opportunities for

tamariki to feel involved even if they are unable to join in physically during an event.

Location and setting: Online

Cost: Free

Age: 5-12 years of age ideal

Availability: All year Further information:

www.envirohub/saveourspecies or www.facebook.com/conservationkidsnz.

Picton Environment Centre

Envirohub Marlborough is one of three charities that comprise the Picton Environment Centre (PEC) in Picton. The Centre provides access to advice, connections, support and a premises for students, teachers and families to pursue their own conservation ideas and campaigns. The site also hosts many of the Conservation Kids NZ indoor activities and provides a sheltered space for educational events and activities for people of all ages or as a wet weather alternative.

Location and setting: 14 Auckland St Picton,

leading to outdoor events

Cost: Free

Age: Open to all ages **Availability:** All year

Further information: www.envirohub.co.nz or keep watch out for our events on Facebook: @envirohubmarlborough, @conservationkidsnz, @pictonenvironmentcentre.





KAIPUPU SANCTUARY

Project summary

Kaipupu is a community-run sanctuary which maintains mammalian predators (rodents, mustelids and possums) at very low numbers by using intensive trapping and a predator-proof fence. Bird monitoring has shown a significant increase in bellbirds and steady populations of other species. The sanctuary has a well-formed public track which meanders through mature and regenerating native forest, and areas planted by schools and other groups. Public access to Kaipupu Point is via water transport to our jetty on the northwest side.

Education programmes

Education at Kaipupu

Environmental education combines classroom activities and field trips to Kaipupu Sanctuary. Children get a close-up look at mounted specimens of New Zealand birds and predators and learn about threats that native species face due to habitat loss and predation.



This learning includes:

- How the predator-proof fence functions
- Methods for trapping and monitoring predators
- Translocation of species (robin and kiwi)
- Use of artificial refuges (wētā, penguins and lizards)

Students are also introduced to indigenous plants and their roles in food webs, and how we are monitoring plant growth at Kaipupu Point.

Education programmes can be structured to meet children's current knowledge, classroom curriculum and time available. We encourage the development of empathy for wildlife as a basis for taking long-term responsibility for New Zealand's special environment.

Location and setting: Combination of in-class (about 1 hr) and a field trip to Kaipupu Sanctuary (40 min minimum, up to 1 hr 30 min)

Cost: Water taxi (about \$10 per head)

Age: Any school age **Availability:** All year



Surf to Turf - Educational Trip

The day will start on the Picton foreshore with a quick introduction and welcome. Then we board the yacht 'Steadfast' to go out to Kaipupu Sanctuary where an educator will introduce the concept of a predator-free environment, highlighting the interconnectedness of all the components of the land-based ecosystem. The educator has an assortment of exercises and activities which will engage all the students and ensure learning through games, fun and enjoyment.

Next, the group will board the Steadfast again to head into the Queen Charlotte Sound and look at similar concepts, but on the ocean. On the boat the sails will be raised and activities include:

- Drop a BUV (Baited Underwater Video) somewhere where we can retrieve it on the way back
- Collect and look at plankton with a microscope
- Water visibility check using a secchi disc/sighting tube
- Bottom sample along with measuring depth

- Spot all wildlife and note what they are doing
- Tracking our position because we want to know what we are seeing in context with the land

Students swap around all the activities, trying their hand at each to ensure a good range of skills and learnings are covered.

The action-packed day starts in Picton at 9:30am, returning by 2:30pm. Up to 28 students and 5 teachers/helpers can be accommodated. The trip is funded by Port Marlborough and an application must be made to them for approval prior to booking. Please contact Anna at Kaipupu for bookings and more details.

Location and setting: Kaipupu Sanctuary and

the Queen Charlotte Sound

Age: Any school age Time required: 5 hours Availability: All year

Further information: Anna Polson

(admin@kaipupupoint.co.nz) or Andrew John

(03 573 5509 or celtsh2017@gmail.com)
Website: www.kaipupupoint.co.nz





KORU NATIVE WILDLIFE CENTRE

Project summary

Koru Native Wildlife Centre specialises in breeding and raising some of New Zealand's threatened native species. The centre's experts in pest management, education and engagement with conservation run a programme in which young people can learn more about species like giant wētā, kākāriki/parakeet and gecko, and about conservation measures to protect these species. Our latest addition is the close-up room, where students can examine insects through microscopes. To arrange a school visit, contact the centre.

Location and setting: Koru Native Wildlife Centre is located in Smiths Farm Holiday Park

Cost: Donation appreciated

Age: 8+

Time required: About 1 hour **Availability:** By appointment only

Further information: Contact Ellen and Brian Plaiser, 027 448 3447, info@tuinaturereserve.co.nz

Website: www.koruwildlife.nz





LOCHMARA LODGE

UNDERWATER OBSERVATORY, CONSERVATION AND WILDLIFE IN THE MARLBOROUGH SOUNDS

Project summary

Lochmara Lodge is located within the Marlborough Sounds, a short 20-minute boat ride from Picton or Mistletoe Bay. Nestled amongst 11-acres of beautiful native bush, Lochmara boasts a host of active conservation projects that provide the ultimate educational experience.

Lochmara employs a small team of fully qualified zoologists/marine biologists to guide you through the grounds, focusing on the native wildlife, active conservation efforts, native species breeding programmes, and also featuring an underwater observatory

Lochmara is a unique, accessible, and affordable educational experience encompassing both land and sea in a single visit. Our specialist educators can provide both emersion into the native bush and wildlife, as well as a close-up and sensory glimpse into the underwater world of the Marlborough Sounds.

Education programmes

The environmental education programmes at Lochmara Lodge focus on connecting students of all ages to the natural world of the Marlborough Sounds. Through such a connection, students are provided an opportunity to truly appreciate our local land and sea environments. By raising awareness of the challenges and human impacts affecting these ecosystems, our goal is to inspire each student to learn and take positive action to protect our natural world.

Our fully qualified educators can ageappropriately cater each educational experience to suit your class or group, from primary to tertiary levels. The tours and educational experiences at Lochmara can also take into consideration any specific aspects of your classroom curriculum.

Water transfers to Lochmara are on the Lochmara water taxi.



The Underwater Observatory Tour

The one hour fully guided underwater observatory tour includes hands-on experiences at the seaside touch tank, guided access to the underwater observatory and a potential stingray encounter*.

- Our seaside touch tank is a hands-on sensory experience led by our guide.
- The underwater observatory component is a stationary glass-bottom boat that allows students to view the wide variety of wild organisms in their own habitat they call home
- * Please note: stingrays are wild, so encounters are subject to their appearance on the day.



An additional 30 minutes of focused learning on a topic suitable to your curriculum or learning unit can be added on to this tour upon prior agreement, and with an additional fee. Once the guided tour is complete the students have access to the numerous nature trails at Lochmara, where they can explore and enhance their learning experience.

The Conservation Tour

The one hour fully guided conservation tour takes students on a walk through the native bush of the Lochmara grounds. Focus on the flora, fauna and sustainability, Highlights of the tour include a visit to the native red-crowned kākāriki exhibit and meeting New Zealand's threatened long-finned eels.



Best of sea and land

Combine both the Underwater Observatory Tour and Conservation Tour for the full land and sea experience for your students.

This is a very popular choice, and provides a comprehensive view of conservation, sustainability and biodiversity on both land and sea

Explore Lochmara

Enjoy a mini cruise of the Queen Charlotte Sound on your journey to the lodge and explore the natural beauty of Lochmara at your leisure. Discover the numerous nature trails and meet a variety of both wild and captive species as you explore. Guided animal feedings of our redcrowned Kākāriki, long-finned eels and Kunekune/pigs are available at set times.

Pricing, Location and Setting:

On land and sea at Lochmara Lodge, Queen Charlotte Sound.

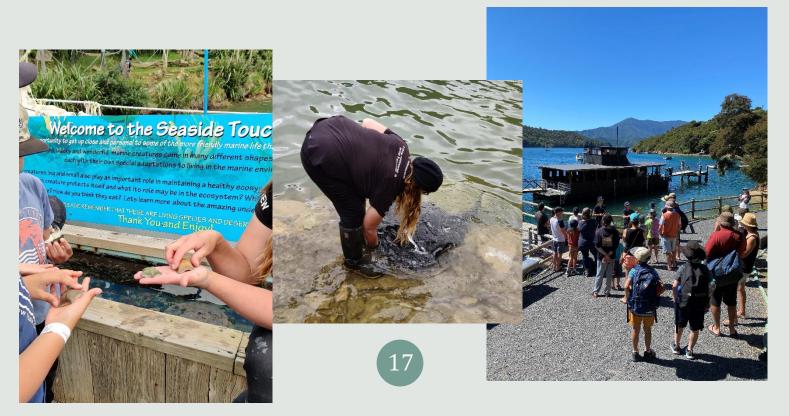
The price includes return Lochmara boat transport from Picton, access to on-site nature trails, and is for a minimum of 25 people:

The Underwater Observatory Tour: \$35 pp
The Conservation Tour: \$30 pp
Best of Sea and Land: \$39 pp
Explore Lochmara: \$25 pp

Lochmara one-way water taxi options are also available on request.

For further information on all tours or to make a booking please contact us on

www.lochmara.co.nz or enquiries@lochmaralodge.co.nz





MARLBOURH DISTRICT COUNCIL

Project summary

Marlborough District Council (MDC) offers conservation and environmental education programmes that are grounded in our region and based around local landscapes, places, and infrastructure. Activities cater to all year levels, covering a range of learning areas including sustainability, biodiversity, waste minimisation, water conservation, freshwater health, and organic gardening principles.

The programmes and activities have the flexibility to be tailored to meet the needs of individual schools and enquiry topics.

Education programmes

Enviroschools

Enviroschools is a framework that ties
Education for Sustainability at your school
together. The programme includes a studentdirected process of exploration, decisionmaking, action, and reflection. Funded
facilitators work with students to design, plan,
and implement action projects with
environmental and educational outcomes that
lead their school, and wider community, on a
journey to become more sustainable.

Kids Edible Gardens

Kids' Edible Gardens are outdoor classrooms. Children connect with the environment around them, taking responsibility for their school gardens and learning lifelong skills of organically growing fruit and vegetables, from seed to table. The children are led by a facilitator funded by MDC; their work in the garden is supported by classroom activities led by teaching staff.



Individual Environmental Education Lessons

We offer a number of 'stand-alone' learning sessions and resource kits on Freshwater, Marlborough's Water, Living Landscapes, Waste Minimisation and Food Waste. These may be used as an introduction to an enquiry topic or investigate and scaffold students' knowledge of a topic more fully.

- Waste Minimisation Activities explore the types of waste likely to be found around your school and community. The spotlight is put on school waste as students take action measuring and mapping their waste. Tours are of MDC waste management centres and facilities are offered to investigate how waste is managed here in Marlborough. A Zero Waste Kit is available for schools to use while investigate this topic fully.
- Food and Organic Waste While Waste
 Minimisation has a focus on inorganic
 waste and waste management, this set of
 facilitated activities explore organic waste.
 Students will study how waste is delt with
 in nature and investigate why soil is the
 key to a healthy environment. They are
 empowered to introduce one of three ways
 to recycle food waste at school.
- Living Landscapes Our native biodiversity is the focus of this set of activities; students will gain an understanding of the importance of healthy biodiversity as they find and identify native

plants and insects. Students learn how to be Kaitiaki of our natural green spaces. The Living Landscapes Kit supports these activities and allows schools to dig deeper into the topic in their own time.

• Marlborough's Water - Students explore the fascinating journey of Marlborough's water supply while considering how much of the world's water is actually drinkable and where 'stuff' goes when they put it down the drain. During tours of the Water Treatment and Wastewater Plants, Council Engineers explain the processes used to operate these essential services. Students are shown how to care for their urban streams.

Location and setting: Activities are designed to take place at school or a nearby green space. Tours are of local Marlborough facilities.

Cost: Facilitation is funded by MDC. Schools will be responsible for costs associated with transport to and from the Tours.

Age: Lessons can be adapted to all year levels
Time required: 1-2 hours (depending on the
year level, activity or time of each lesson)
Availability: Most are available year-round
Websites:

https://www.enviroschoolsmarlborough.co.nz/ https://www.marlborough.govt.nz/environment /environmental-education

Contact: Brochures and information about these lessons, Enviroschools and Kids Edible Gardens are available from Annie McDonald anniemcdonald@marlborough.govt.nz





KĀREAREA, FALCONS IN MARLBOROUGH SCHOOLS PROUDLY BROUGHT TO YOU BY Marlborough

Project summary

The Marlborough Falcon Conservation Trust is devoted to promoting the survival of the kārearea/New Zealand falcon – our last remaining endemic bird of prey. We aim to:

- Increase awareness and enthusiasm for kārearea through our educational programme
- Rehabilitate sick and injured kārearea and breed their chicks for release into the wild
- Lessen dangers to kārearea, such as electrocution, shooting and predation

Education programmes

The education and advocacy programme aims to increase awareness and appreciation of kārearea while realising the importance of protecting all our native species.



Classroom visit

We offer a 45-minute classroom-based visit to Year 3 and Year 4 students within the Marlborough region. Our interactive lesson includes a PowerPoint presentation and a visit from a handler with a live kārearea. Students will meet our advocacy kārearea up close and even feed her lunch!

Students will learn key kārearea facts and their importance within Māori culture, the dangers kārearea face in the wild and how the students can help increase the kārearea population. Previsit activities are provided, and students receive an educational booklet.

We guarantee students will find the programme stimulating and educational. Students will remember seeing a live kārearea for a lifetime!

Location and setting: At school

Cost: None

Age: Years 3 and 4

Time required: 45 minutes Availability: Terms 2 and 3

Aviary visit

We offer a behind the scenes tour of our purpose-built kārearea breeding and rehabilitation facility for up to 30 students at a time. We house 20-25 New Zealand falcons, many of whom have an injury that decreases their chance of survival in the wild. The students will also have the chance to meet our advocacy falcons up close and enjoy an educational talk.

Location and setting: Brancott Road

Cost: None

Age: All primary and secondary-aged students

Time required: 1 hour

Availability: Terms 2 and 3

Further information: Contact Lizzie Mcfarlane marlboroughfalcontrust@gmail.com or visit

www.mfct.org.nz.





MARLBOROUGH LINES HERITAGE EDUCATION PROGRAMME

Project summary

Heritage and conservation connection through innovative and effective learning experiences. Local area history at your doorstep! Offering in-depth programmes aligning with Aotearoa New Zealand History Curriculum and much, much more!

Education programmes

Programmes outside the museum feature field trips to sites of historic, cultural, or geological significance, overnight camps or tutored activities, at or near your school.

Museum-based programmes operate from Marlborough Museum, at Brayshaw Park. We use a wide range of on-site displays and resources to provide innovative, effective, and fun learning experiences.

Options are flexible and readily adaptable to your specific learning objectives. Talk to us in advance with your ideas and requirements.

Check out the new Marlborough Lines Heritage Education Programme.

Location: Indoor and outdoor field trip options available. Ability to work in or with school camp destinations

Further information: blair.walker@marlboroughmuseum.or.nz or Programme Padlet

Website: www.marlboroughmuseum.org.nz





MISTLETOE BAY ECO VILLAGE

Project summary

Mistletoe Bay Trust is a not-for-profit charitable organisation. The eco village offers a sustainable facility for day trips or overnight camps. This facility has a focus on environmental education where students can learn hands-on sustainable living within a coastal ecosystem. Sustainability and conservation practices at Mistletoe Bay include energy conservation, water conservation and waste management. It is an ideal base to learn about the bush and marine environments. Mistletoe Bay Trust educational programmes aim to:

- Promote education through hands-on adventure and practical education
- Practice sustainable living in a place where it clearly makes a difference
- Foster learning by leaving only footprints and taking only memories

Education programmes

The Mistletoe experience

The mistletoe experience includes a sustainability tour, sailing, kayaking, fishing, tramping, camping, beach/stream/pond study, native planting, maintaining vegetable gardens (Eat-Fit Programme) and enjoying the native bush and bay. Mistletoe Bay can fit into your learning requirements. For overnight trips, schools have two different accommodation options: whare (cabins) or camping.

Location and setting: Mistletoe Bay Eco Village and surrounding reserves (bush and marine)

Cost: Accommodation \$10-20 **Age:** Primary to secondary school

Availability: All year

Further information: https://www.mistletoebay.co.nz/school-camps/



Marine studies with NZ Marine Studies Centre

Mistletoe Bay is a perfect setting to host the New Zealand Marine Studies programme. See the <u>New Zealand Marine Studies Page</u> for further details.



NZ MARINE STUDIES CENTRE

Project summary

The Marlborough region is a fantastic place to study all things marine. We offer programmes that have been adapted to the "Top of the South" and allow students to get out to sea ("Voyage of Discovery") or experience the marine world from your classroom through live streaming. Visit www.otago.ac.nz/marine-studies/learning/nelson.

Education programmes

1. Primary Programmes

All our primary programmes are experiential. Programmes and topics can be adapted to the needs of the class and cover a wide variety of topics including food chains, adaptations, Māori fishing methods and technology, beach studies, fishing and sustainability! Some of the programmes are based on boats like the "Voyage of Discovery", others allow for virtual gatherings in the classroom.

2. Secondary Programmes

Secondary programmes at the senior levels link into NCEA requirements like Biology 3.1 Small Animal Studies, which are run in conjunction with the Cawthron Institute and NMIT. Shoreline transects for Level 2 and comparative dissection/anatomy sessions fit well at any level. At lower levels there are many options, from shark studies to learning about food chains.

3. Citizen Science and Resources

There are often special events like Seaweek or Conservation Week that may have a 'limited time' programme to engage with. We also offer many of our programmes online, engaging with a marine scientist in Dunedin to look at sea creatures from the classroom. Citizen Science Programmes include Marine Metre Squared (schools can participate in long-term monitoring of a local shoreline) and Shark Spy (students can activity-engage in analysing underwater video footage to

collect data on sharks in New Zealand waters. A range of marine resources are available to support the programmes: www.otago.ac.nz/marine-studies/resources.

Logistics of Activities 1-3

Location and setting: Various

Cost: \$4 per student, \$200 transport levy

Age: All ages

Availability: All year, bookings required

Further information: ph. 021 4 OCEAN (62326) or

portobello.marinescience@otago.ac.nz.

Voyage of Discovery with Steadfast

The Voyage of Discovery programme is conducted in partnership with Steadfast Traditional Sail. This programme is offered from Picton or Mistletoe Bay Eco Village. The programme involves up to 28 children rotating through 7 activity stations on board Steadfast at sea. Activities include old-time navigation methods like heaving the lead line, trailing a ship's log, steering and dead-reckoning navigation, as well as a bottom trawl (for finding out what's down there) and a plankton net and microscope (for getting a close-up view of the little critters). Check out our Voyage of Discovery video.

Location: Picton or Mistletoe Eco Village **Setting:** on board a 58' traditionally built cutter

Cost: \$4 per student for the educator

Age: Years 4-10, level 3-5

Availability: All year, bookings required

Further information:

www.steadfastsail.co.nz/schools/



PICTON DAWN CHORUS

Project summary

Picton Dawn Chorus aims to make 2,000-4,000 hectares of land in and around Picton predator-free using trapping methods.

Education programmes

We can take children with us to check trap lines. They will learn about traps and identification of pest species. There is also the possibility to involve children in pest monitoring using chew cards and bird monitoring using bird counts. We can help with school programmes around making traps, monitoring traps and also looking at catch data from trapping in gardens.

Trapping in action

Take a walk along a trap line to learn about the traps used in pest control. Learn how to rebait and set a trap, identification of pest species (mice, rats, possums, mustelids) and general bush knowledge while out walking (identifying some birds, plants and trees etc).

Make your own trap

A hands-on activity making simple traps that children can take home and set in their own garden. They can then have the responsibility of maintaining the trap and tracking catches.

Location and setting: Victoria Domain - bush area without facilities

Cost: None Age: 5+

Time required: 1 hr Availability: Flexible

Website: www.pictondawnchorus.nz

Further information: Contact our Administration Coordinator, administration@pictondawnchorus.nz (03)928 4957 Ext.0





PINE VALLEY OUTDOOR CENTRE

Project summary

We are a non-profit private facility run by volunteers and available for single-use bookings. The camp can accommodate up to 60 overnight guests. Our aims are to enable every primary school child the opportunity to:

- Camp in a safe rural environment at an affordable price
- Build their confidence and self-esteem
- Appreciate the natural flora and fauna

Education programmes

A range of activities and programmes are available including school camp activities, the pine valley trapping line, access to Mt Richmond forest park, a wetland restoration project and heritage education.

Pine Valley activities

Location and setting: Pine Valley Outdoor Centre, 45 Pine Valley Road

Cost: Camping fees or \$2 per person donation for day visits

Availability: All year

Website: http://www.pinevalleyoutdoors.org.nz

Further information: admin@pvoc.co.nz or 03 972 0752

Pine Valley/Mill Flat DOC field trip resources

DOC has developed teaching resources that can be downloaded and used while visiting the Pine Valle/Mill Flat area. The resources are ideal for groups who want to study the freshwater and forest environments while learning about a forest ecosystem and conservation techniques.

Time: Minimum 2 hours

Cost: Free

Age: Pre-school and primary school

Teaching resource: https://www.doc.govt.nz/get-involved/conservation-education/resources/local-field-trips/marlborough/mill-flat-field-trip/





TE HOIERE/PELORUS BAT RECOVERY PROJECT (FOREST & BIRD)

Project summary

The Te Hoiere/Pelorus Bat Recovery Project runs a predator trapping programme at Pelorus Bridge Scenic Reserve to protect one of the few remaining populations of critically endangered long-tailed bats in the top of the South Island. The project is managed by Forest & Bird and achieves most of its predator control work at the reserve through dedicated community volunteers who regularly check a network of rat, stoat and possum traps. Long-tailed bats are monitored by staff and volunteers during the summer to find the bats' roosts and trees and to assess whether the pest management programme is protecting the bats. From 2022, staff will also undertake predator control and habitat restoration work at other sites that are important for bats in the Te Hoiere/Pelorus catchment.

Education programme

This resource will provide students with the opportunity to view long-tailed bats on the wing at twilight as they forage for aerial insects in their native forest habitat. Students will use bat detectors to 'translate' the echolocation calls of bats to audible sounds. This activity is ideal for groups studying native wildlife, forest habitats and conservation topics. The resource can be used as an evening activity while staying at Pelorus Bridge Scenic Reserve campsite and fits in with the wider education resource:

www.doc.govt.nz/pelorus-bridge-teaching-resource.

Long-tailed bat viewing

The programme involves a teacher-led field trip to Pelorus Bridge Scenic Reserve to view bats in their natural habitat. The Bat Recovery Project has hand-held bat detectors that are available for hire from Pelorus Bridge café. The bat detectors can be used to 'tune in' to bats flying overhead, and students can view them as they forage on the wing for insects. Bats can often be seen over the main carpark at dusk – the grassy island in the middle of the carpark is a good place to spot them from. This activity is best combined with initial enquiry-based lessons in the classroom, reinforced with

follow-up discussions post-field trip, and provides opportunities to discuss a broad range of topics e.g. science and technology, threats, conservation and extinction processes. Note that this activity is restricted to fine evenings during warmer months (October-March) when bats are most active. To get started on bat-related topics in the classroom, have a look at the 'Starters and Strategies' teaching resource all about bats called 'Discovering pekapeka – New Zealand's native bats' at www.starters.co.nz (type 'bats' into the search field).

Location and setting: Pelorus Bridge Scenic Reserve (original podocarp-broadleaf forest) Cost: Gold coin donation per bat detector hired Age: Children old enough to be away from home in the evening

Time required: Approx. 1 hour, starting at dusk **Availability:** Collect bat detectors from the café or campground office during the day. If you will be arriving at the reserve after 5pm pre-arrange detector collection with the Bat Team Leader **Further information:** Gillian Dennis

(Bat Recovery Project Bat Scientist/Bat Team Leader) g.dennis@forestandbird.org.nz



Te Hoiere/Pelorus
Bat Recovery
Project





TE WHANAU HOU GROVETOWN LAGOON

Project summary

The restoration of Grovetown Lagoon to enhance the habitat for fish and bird life, and to enable gathering of food and encourage recreational uses.

Education programmes

Grovetown lagoon scavenger hunt

DOC has created a school education and activity kit based around Grovetown Lagoon. The activities focus on educating students about the history (natural and cultural) of the lagoon, and the transitions that occur within the wetland/lagoon area - from weeds to new plantings to stable forest or wetland vegetation. Activities also include planting and planting maintenance according to the planting plans that are being put together for each area of the lagoon – each with a different purpose. Some activities are appropriate for all ages, others are more appropriate for a particular age group. Included in the kit is all the equipment needed to carry out all the activities.

The Grovetown Lagoon Education Kit is available from the Department of Conservation, Renwick Office. Contact Caroline Cornelius on 572-9100/027 2112928 or cornelius@doc.govt.nz.



Wetland warriors

Volunteers meet most Wednesdays - https://www.facebook.com/events/266751610894393/?ti=icl

Location and setting: Grovetown Lagoon

Cost: None

Age: All school-aged children

Availability: All year

Website: www.grovetown.co.nz

Further information: info@grovetown.co.nz





TOYOTA KIWI GUARDIANS

Project summary

A partnership between Toyota and the Department of Conservation - Toyota Kiwi Guardians is an outdoor activity programme for kids to learn about nature and earn cool rewards.

- Follow adventure maps and explore Kiwi Guardian Sites
- Take actions in your backyard or at school
- Attend special events
- Earn Kiwi Guardian medals



Toyota Kiwi Guardians for schools and groups

Toyota Kiwi Guardians activities can be used by teachers and leaders with more than five children doing a Toyota Kiwi Guardians adventure or action. Activities can easily be linked with wider conservation education resources to support student learning. We have developed an easy redemption process specifically for groups – teachers can apply for certificates to encourage their environmental actions.

Further information: https://www.doc.govt.nz/parks-and-recreation/places-to-go/toyota-kiwi-guardians/schools-and-groups/

Marlborough adventure locations

Each Kiwi Guardians adventure will earn you a different medal – see how many you can collect across the Marlborough region (or even the rest of New Zealand!). Download the map for your adventure, complete the activities as you follow the map and reach the end point where you will find the Toyota Kiwi Guardians post or plaque. On it, you'll find a special code word to claim medals and certificates for your school group. Marlborough has three Toyota Kiwi Guardians adventure locations:

- 1. Kaipupu Sanctuary Kiwi Guardians at Kaipupu Sanctuary (doc.govt.nz)
- 2. Taylor River Reserve Kiwi Guardians at Taylor River Reserve (doc.govt.nz)
- 3. Mill Flat, Pine Valley Kiwi Guardians at Mill Flat, Richmond Forest Park (doc.govt.nz)

Cost: Your own transport to the location (note: boat transport is needed to reach Kaipupu Sanctuary)

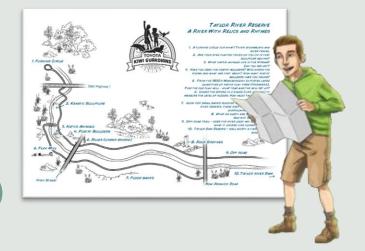
Age: Pre-school and primary school

Availability: All year

Further information: https://www.doc/govt.nz/parks-and-recreation/places-to-go/toyota-kiwi-quardians/









INDEX: FOCUSES AND STRENGTHS OF OUR CONSERVATION EDUCATORS

Kaitiakitanga	Leadership	Weed control	Pest trapping/tracking	Planting	Practical learning	Freshwater	Marine/coastal	Forests	Wetlands	Habitats	Freshwater species	Marine species	Reptiles	Insects	Birds	Species	Captive rearing	Restoration	Conservation techniques	Climate	Pollution	Weed pests	Animal pests	Impacts	
																				Ą	S				Climate Karanga Marlborough
P	S	ħ	Ą	S		Þ	Ą	Ą	Ą		Þ	ħ	ħ	Þ	Þ			ħ			Ą	Ą	ħ		Department of Conservation
S	S		S	S		S	Þ	Þ			Þ	ħ	ħ	Þ	Þ		S	S			Þ		S		Envirohub & Conservation Kids
		ħ	Ą	Ą				Ą					S	S	'n			ħ				Ą	ħ		Kaipupu Sanctuary
													ħ	Þ	ħ		ď						Ā		Koru Native Wildlife Centre
			S			S	Ą	S			P	ħ	ħ	Þ	Þ		ħ	ħ		S	S	S	ħ		Lochmara Lodge
ď						Ъ			S		Ā			ħ							Ъ	S	S		Marlborough District Council Education Programmes
Ą															Ъ		S								Marlborough Falcon Conservation Trust
																		ħ							Marlborough Lines Heritage Education Programme
	S										Ą			ħ	ħ						S	S	S		Mistletoe Bay Eco Village
S							Ą					ħ								S	S				NZ Marine Studies Centre
			Ą	S				S										S					ħ		Pelorus Bat Recovery Project
			Å	S				Ą							ħ			ħ					'n		Picton Dawn Chorus
Ą	ħ		Å								S		S	S	S			S					S		Pine Valley Outdoor Centre
Ą		Ą		Ą		S			Ą		Ą			S	S			Ъ				Ą			Te Whanau Hou Grovetown Lagoon
Þ						Ą		Þ			P		ħ	Þ	Þ			S							Toyota Kiwi Guardians

P = Primary focus, S = Secondary focus

