



# Exploring nature with children

*Nau mai, haere mai ki te Ao Tūroa*



Department of  
Conservation  
*Te Papa Atawhai*

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Exploring the natural world. Cover and inside photo: DOC/Adrienne Grant.

# Nau mai, haere mai ki te Ao Tūroa

## *Welcome to the natural world*

The natural world is a playground and place of discovery for adults and children alike. . . it is a place for adventure, exploration and imagination as well as generating a deepening care and connectedness with our environment.

In New Zealand, we pride ourselves on our outstanding natural environment, but how connected are we to it really and how are we sharing it with our children?

Intuition and research tells us fewer children are having direct experiences with nature. They are spending more time playing indoors, in front of the computer, television or connected to mp3s or gaming devices. We also know that early and frequent positive experiences in the natural environment have a major impact on the healthy growth of a child's mind, body and spirit<sup>1</sup>.

As parents, grandparents and/or guardians we have a critical role in fostering that natural 'sense of wonder' that kids have. Connecting our children with nature through hands-on, informal exploration and play is a great way to do this.

This booklet is designed to give families practical ideas to share and enjoy the natural world - whether it be in your own backyard or out and about in local parks, reserves and beyond.

*If tomorrow's caretakers of the earth  
are to love and understand the natural world,  
they need to explore it, enjoy it  
and recognise our reliance upon it<sup>2</sup>.*

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1 DOC 2011: Benefits of connecting children with nature.

2 Danks, F. and Schofield, J. 2005.



# Encourage curiosity

Spending time exploring nature with your children is about having fun and encouraging their natural curiosity.

Take time to pause and look more closely. Welcome questions and ask them yourself. You don't need to have all the answers. Ask open ended questions to encourage your children's curiosity and thinking whether at home or out and about:

Why do you think . . . ?

Where do you think . . . ?

What else might be affected . . . ?

What do you think has happened here?

How are they alike? How are they different?

What do you think would happen if . . . ?

How could we find out more?

*Titiro mai!*



## Play “What If . . . ?” games

“What if” generates alternatives, opens up possibilities and encourages inventiveness and experimentation.

You can play ‘what if’ on car trips, while going on walks or wherever:

- What if this was 1812 instead of 2012?
- What if there were no worms?
- What if there were no trees, no bees?
- What if we stayed out here the night?

Encourage alternative thinking, experimentation and ‘mistakes’ – mistakes are really learning opportunities after all.

Use “what if” to help your child with problem solving, designing, and reading stories. Keep it optimistic and playful.

Remember you are there to encourage and support – let them make their own discoveries.

## The best thing you can spend on your children is time

Taking time with your children and allowing space for play and curiosity will turn a walk into an adventure. Slow down and explore - notice the little things as well as the big.

Listen and quietly watch the rhythms of nature. Lie down with your kids in long grass or under a tree, you will be surprised what you start to notice and hear once you tune in to the natural world around you.

*Ko te wā te mea nui  
mo ngā tamariki!*

Investigating a hollow tree.  
Photo: DOC/Adrienne Grant.



# Creative play

Creative play is a great way to engage in the natural world . . . whether it be through visual art, story telling, imaginative adventures, or just getting in and amongst it!

Children use all their senses when they are able to immerse themselves in creative play and exploration in nature. It is the place where they build their sense of wonder and connection with the environment.

Frequent, informal experiences in nature at a young age can develop life-long awareness and sensitivity to the environment.

Photos (this page and opposite top): Children at the award winning Fiordland Kindergarten Nature Discovery Programme get immersed in the environment whatever the weather!

<http://fiordlandknaturediscovery.blogspot.co.nz/>





## Art making

Encouraging children to use natural material will focus their attention on its special qualities.

Use imagination . . . get creative . . . things don't always need to be bought. Your garden can be a great source of art and craft materials. Leaves, stones, twigs, bamboo and flax make excellent construction materials. Grasses and branches can even be used as paint brushes. Set your children (and yourself) the challenge of only using natural or recycled materials.

Have art making sessions outside . . . make temporary sculptures, paintings or collage with the materials you find when you're outside exploring together.

## Some ideas

- Focus on colour - for example - how many leaves can the children find that aren't green? Can they find the colours of the rainbow on your walk through a park together?
- Create some Land Art using natural materials when out exploring.



L: Making a stick insect to join the one found in the garden. R: Land art examples.

Photos: Sarah Mankelow



- Create a rainy day recycling box for indoor conservation-themed art. It might include toilet rolls, egg-cartons, bottle tops, feathers, acorns, old magazines, scraps of fabric and some craft essentials like glue, scissors, pipe cleaners, paint etc. Help your child choose a theme for their activity - like underwater life, mini-beasts or forest birds.

## Creating wild spaces for play

Remember as a child how much fun it was to play in long grass, climb trees, or make a hut?

Creating wild spaces for play can be as simple as not mowing part of your lawn, or allowing your kids to climb certain trees. Develop a 'code of conduct' with your children to keep them **and** your garden safe.



Top L: <http://fiordlandknaturediscovery.blogspot.co.nz/>

Top R: Huts at the beach. Photo: Diana Morris. Bottom

L: Creeping through the vegetation. Photo: Debbie Kane.

Bottom R: Making a hut in the orchard. Photo: Irving family.

## Making huts

Kids love huts! Help your kids make a hut out of prunings from the orchard or grow a 'living' hut. Divaricating native plants such as *Corokia*, *Coprosma* or *Muehlenbeckia* species can be planted and tunnels carefully pruned into them. Or you could try planting manuka or kanuka and weaving them into a hut shape.

Willow is popular overseas for making living huts but as most willow species are weeds in New Zealand, if you are using willow, make sure it is from a sterile tree.

## Care code for creative play outdoors

While encouraging outdoor play, teach your children to care and respect the environment. Remind them they are playing in the home of Tāne Mahuta - the atua or guardian of the forest and of all plants, birds, invertebrates and other animals that live within it.

- Be very gentle if handling live creatures - always return them to where you found them.
- Avoid damaging living plants.
- Avoid disturbing nesting birds.
- If you turn over a rock or a log to see what's underneath, always turn it back.
- Consider other people's enjoyment of the area.
- Collect only dead materials for art and craft, and take only what you need.
- Remember it is illegal to remove any plants, animals, insects, stones from public conservation land.
- Never drop litter and take your rubbish home.

***Toitū te whenua - leave the land undisturbed***



# In your own backyard

You don't need a lot of space to appreciate, explore and extend nature in your own backyard. Even if you have an inner city apartment with a small balcony there should be room for a potted herb or flower garden that attracts insects and space for a worm farm to create your own compost.

If you're lucky enough to have a small bit of land and want to encourage wildlife into your backyard, it is all about making it safe and welcoming for your visitors. You need to ensure there is a strong network of food available all year round by planting for birds, and creating 'wild places' for insects and lizards. Essentially you want to strengthen your **biodiversity** and natural **ecosystems** (p8). Involve your kids in this, they will love it, and it's a great learning opportunity for the whole family.

If you would like to get more 'hand's on', but don't have your own land, get involved in a local community conservation project – there are hundreds to choose from all over New Zealand. Regional, district and city councils and the Department of Conservation are good starting points and will be able to point you in the right direction.



Growing native plants like carex, libertia and dwarf flaxes provide habitat for native invertebrates and lizards and are easy to maintain. Photo: DOC/ Adrienne Grant.

## The amazing web of life – what’s it all about?

### *Te whare o te oranga!*

#### **Biodiversity**

Biodiversity is the variety of life on Earth. This means the number and variety of all biological life - plants, animals, fungi and microorganisms. Biodiversity (short for biological diversity) determines the ability of a habitat to provide for its inhabitants and it shows us how everything on Earth is connected and has a role to play.

#### **Ecosystems**

Ecosystems are communities of plants, animals, insects, fungi and microorganisms that live together in a particular physical environment – like a wetland, forest, dune, rocky shore . . . or . . . a garden.

The greater the biodiversity of an ecosystem, the stronger its networks and interconnections. A strong, healthy ecosystem has greater resilience to impacts such as extreme weather changes, pest invasion and other ‘outside’ influences. New Zealand’s unique indigenous biodiversity has been greatly challenged by human modification and introduced species (such as possums, rats, mice, stoats), and is unable to compete. It needs all the help it can get!



You can create wild spaces and encourage urban biodiversity by planting native trees and shrubs in a natural way. This garden doubles as a natural fence and would also be very difficult to tag! Photo: DOC/ Adrienne Grant.

## Ideas to get your family started . . .

Your backyard could be as complex and lush as a rainforest, or as infertile and harsh as a desert – if you were a bird or an insect you'd probably know which environment you'd rather live in!

Do your neighbours have more native birds in their backyard than you do? Well, it's probably because they have the right sort of food available - a diverse network of trees, insects, flowers and seeds (and they might even have some pest control going on).



These two houses are three doors down from each other. Spot the difference in biodiversity! Photos: DOC/Adrienne Grant.

## Creating spaces for wildlife

Believe it or not, birds, lizards and insects don't care if your garden is 'messy' – in fact they prefer it! Areas of long grass and thick plantings are much better for them than large expanses of neatly cut lawn. They also make great play spaces for your kids.

- Plant a variety of trees and shrubs that offer fruit, flowers or nectar as food for birds and lizards.
- Make sure your garden beds have good natural mulches. Let your prunings rot down naturally.
- Create lizard friendly gardens by leaving piles of wood, stones or bricks lying around in your garden.
- Minimise the use of sprays which will kill native invertebrates - the food source for many native birds and lizards.

## Encouraging native birds

Start by making sure you have a ready food source of native trees and shrubs - these could include kōwhai, flax, kakabeak and tarata (lemonwood) for nectar, and wineberry, karamū and korokia for fruit. Choose plants suitable to your local climate.

The DOC website features a list of important food-bearing plants and a month-by-month calendar of plants for native birds so you can provide a food source all year round:  
[www.doc.govt.nz/getting-involved/home-and-garden/](http://www.doc.govt.nz/getting-involved/home-and-garden/)

Birds such as fantail, grey warbler and silvereye eat invertebrates so plant varieties are not as important as a healthy mix of spiders, moths, beetles, and earthworms etc. A good layer of mulch or leaf litter on the garden will encourage insects, and birds are a natural way of keeping them under control.



**Tui feeding on flax.**  
**Photo: DOC/Herb Christophers**

## Keeping birds safe - *Manaaki ngā manu*



**South Westland Area school students checking trap. Photo: DOC.**

Rats, possums, and hedgehogs are common urban pests that prey on birds, eggs and chicks. If you want to keep your birds flourishing, controlling pests is a must, especially prior to the breeding season in late winter/early spring. Rats are also a major predator of lizards and invertebrates. Trapping is a simple measure you can do at home to make a difference, and something that hopefully some of your kids will enjoy!

For getting started with rat traps see: [www.doc.govt.nz/rattraps](http://www.doc.govt.nz/rattraps).

If you have a cat, you can make it more conservation friendly by getting it de-sexed, fitting a bell on its collar, feeding it at regular times and keeping it inside at night. For other ideas see: [www.doc.govt.nz/getting-involved/home-and-garden/](http://www.doc.govt.nz/getting-involved/home-and-garden/)



## Birdfeeders: birdseed cupcakes, puddings, pinecones!

Help your children become more aware of the birds that visit your property by working with them to set up a safe feeding area. Provide a range of foods such as bird seed, cat biscuits soaked in water, lumps of fat, or bread and solutions of sugar or glucose in water on a bird table or other suitable homemade structure. See if your kids can find out which birds eat which foods. The best time to feed birds is in autumn and winter when food sources are scarce.

### Bird cupcakes and puddings

1. Melt about 500g of fat or lard in a saucepan.
2. Add 1 tablespoon of raw sugar and some pieces of bacon rind (if available).
3. Crumble some stale bread, scones etc in a plastic bag. Add some birdseed, wheat, raisins and broken biscuits into the crumbs.
4. Slowly add the dry ingredients to the fat and stir with a wooden spoon. Your final mixture should be moist - not sloppy and not dry.
5. **For bird cupcakes** - put the mixture into paper cupcake pans and leave in the fridge to set. You can hang the cupcakes from a tree, by adding a length of string to the mix so that you can tie the cupcake to a branch.
6. **For bird puddings**, put the mixture into a basin and press down with a saucer until you see the fat oozing around the end of the saucer.
7. Leave in the fridge to set.
8. Tie it up in a piece of nylon netting like an old onion or garlic bag and hang it from a tree or hook out of the reach of cats.

“Make a Tui Feeder” is a great short film made by 11 year old Hamish Hall. Watch it at: [www.theoutlookforsomeday.net/films/2011/007](http://www.theoutlookforsomeday.net/films/2011/007)

### For birdseed pine cones

1. Cut a long piece of string to hang the bird feeder.
2. Take the string and tie a knot around the pine cone near the top (the stalk end).
3. Using a butter knife, create an equal mix of smooth peanut butter and lard in a bowl.
4. Use the butter knife to spread the mixture inside the pine cone and around the edges.
5. Hold the pine cone over the plate and sprinkle birdseed over it. Roll it in any remaining birdseed.
6. Hang it from a tree or hook out of the reach of cats.



Making birdseed pinecones.  
Photo: Rob Griffiths/DOC.

## Grow your own native plants - *Te tipu i ōu rākau*

A good way to become familiar with native plants is to grow your own - and it's a great opportunity to involve kids. Some seed requires treatment before sowing, but you can collect ripe fruit from the following plants and sow immediately after collection: coprosma species, mahoe, cabbage tree, five finger, wineberry and pate. Ripe black tawa berries can be collected off the ground.

### ***Sowing seeds***

- Fill a clean container (eg. an icecream container with drainage holes) or seed raising tray with seed raising mix to within 3cm of the top.
- Wet thoroughly and allow to drain.
- Press down mix.
- Scatter seeds on top and press down with a flat piece of wood.
- Cover seeds with a thin layer of seed raising mix and then fine pumice.
- Keep damp, warm and shaded until germination occurs.
- Tawa berries can be pushed into seed raising mix (but do not cover).

### ***Transplanting seedlings***

- Transplant seedlings into small pots/bags of potting mix once they have two leaves or more and are at least 2-3cm high.
- Handle by the leaves, being careful not to damage the root hairs, and cover the roots with potting mix before watering thoroughly to settle the potting mix around the plant.
- Place in a cool shady area for at least a week to recover from transplant shock.
- For more on growing native plants visit [www.doc.govt.nz/growingnatives](http://www.doc.govt.nz/growingnatives)

Cromwell Primary students admiring seedlings before potting on. Photo: DOC/John Barkla.



## Minibeasts and creepy crawlies - who bugs who the most?

Bugs, insects, worms and other invertebrates (often referred to as minibeasts and creepy crawlies) may not always be our favourite creatures but they are vital to life on Earth. They make up the complex web of life as decomposers, pollinators, predators or food for insects, birds and other animals.

Despite what you think, and no matter how small your garden, it is teeming with life. Most children are fascinated by insects and creepy crawlies and it is important as parents and guardians to communicate the vital role that these amazing creatures play in the world around us – **they are not all pests!**



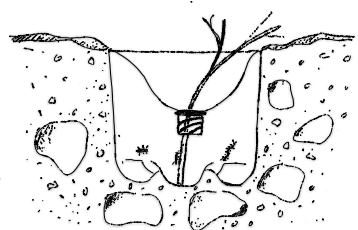
Worm farms are a great way to get kids involved in composting!  
Photo: DOC/Adrienne Grant

Encourage your children to understand the value of minibeasts and creepy crawlies and to get excited about finding them in the garden when digging in the soil, lifting mulch or leaf litter or searching a rotten log.

Help them to create a worm farm or get them involved in composting at home. Check out [www.wormsrus.co.nz](http://www.wormsrus.co.nz) for information on different types of worm farms you can make yourself or buy.

## Take a garden insect census

The number and diversity of invertebrates in your garden is a good indicator of the health of your garden. The more the better! As well as being food for the birds, just think about pollination and decomposition for a moment - we wouldn't get very far without them would we?



Instructions for making a simple insect pitfall trap and taking an insect census are on the DOC website: [www.doc.govt.nz/getting-involved/home-and-garden](http://www.doc.govt.nz/getting-involved/home-and-garden)

The following website is especially designed for insect identification:  
[www.landcareresearch.co.nz/resources/identification/animals/bug-id/what-is-this-bug](http://www.landcareresearch.co.nz/resources/identification/animals/bug-id/what-is-this-bug)

## Create a safe haven for your ‘dinosaurs’ – build a weta motel!

Weta have been around for long enough to see the dinosaurs come and go and are New Zealand icons. Your kids will be freaked and fascinated by these amazing insects and you can encourage their curiosity by helping them to build a “weta motel”.

A weta motel is essentially a nice dry hole that weta can crawl into and be safe from predators like rats, mice, stoats, cats, birds and hedgehogs.

You can go for a 1 star bamboo version, or a more luxury 3-5 star wooden structure depending how fancy you decide to get.

A simple motel can be easily made by cutting a large length of bamboo into sections so the bamboo join forms the roof of the motel. Tie the piece of bamboo vertically onto a tree with a cable tie or piece of string and voila - a 1 star weta motel.



A 5 star weta motel.



A 1 star weta motel  
Photos: DOC/Adrienne Grant.

A luxury 'motel on the ground house weta and gecko. Tihaka/Pig Island, Foveaux Strait.  
Photo: DOC/Rosalind Cole.

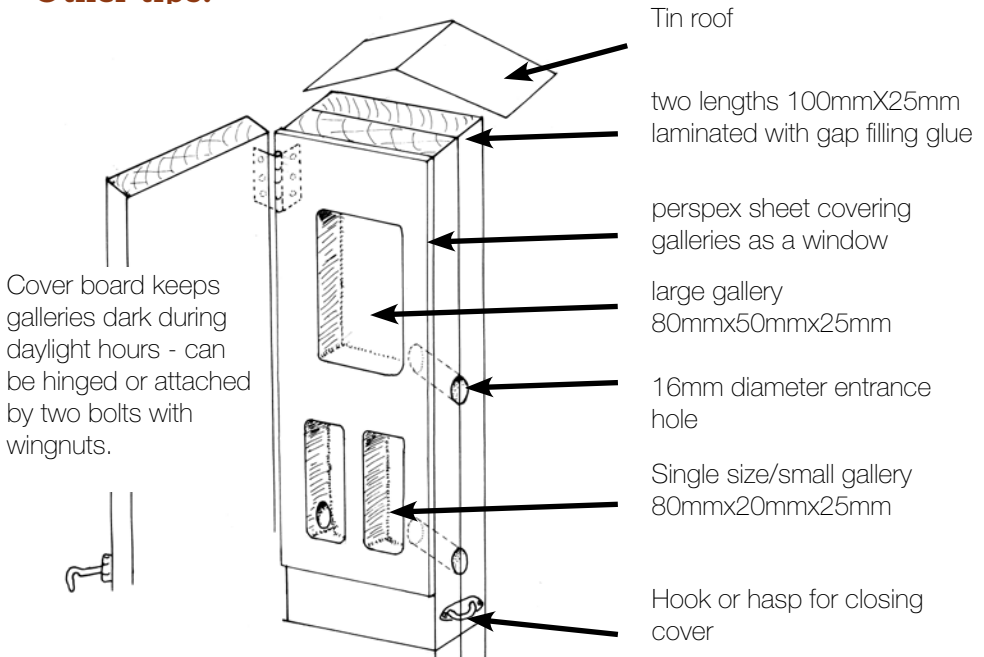




## For luxury weta motels . . . \*

Only essential features are given in this design . . . the sizes of gallery spaces and entry holes are the most important factors.

### Other tips:



- Entrance holes (16mm dia) should be drilled after gap filling glue has fully set.
- Angle the entrance hole to avoid rainwater entering.
- Macrocarpa is the best timber to use, but tanalised radiata pine is okay.
- New motel units require some time for weathering before large numbers of weta will reside inside.
- Place unit on shady side of tree trunk, away from direct sunlight.

You may have seen weta motels in public places with a perspex window covering the cavity. This stops weta falling out when the door is opened, but it is said to cause humidity and is limiting for the weta. Try without or with a piece of transparent acetate or some other similar material. There is also less chance of weta falling out if you only make single size galleries.

\*Designed by George Gibbs, Victoria, University of Wellington.

## Make your own tracking tunnel

Pests like rats, stoats, hedgehogs and mice chew seedlings, nibble seeds and eat insects. Some of them also eat lizards and birds and their eggs and they'll do all this in your backyard. In the bush, DOC rangers use tracking tunnels to record the presence of these animals. It helps them assess what sort of pest control they need to do.

- Inside the tunnel is an ink pad with white paper or card at either end.
- Bait such as peanut butter is placed on a leaf in the middle of the ink pad.
- These particular pests like tunnels so they scamper in to get the bait and then leave their footprints on the paper as they pass through.
- By identifying the footprints you can find out what animals you have in your backyard and can start some targeted pest control. But be aware, all footprints might not be pests - insects may also try out the tunnel.

Your kids might be interested in making a tracking tunnel out of plastic milk bottles or some corflute. They'll have to experiment, but that's what technology and design is all about!

See [www.doc.govt.nz/getting-involved/home-and-garden](http://www.doc.govt.nz/getting-involved/home-and-garden) for detailed instructions and the equipment you'll need.



A simple tracking tunnel made out of milk bottles and covered with black plastic. On a small plastic lid in the middle is a tissue with red food colouring and a teaspoon of peanut butter. The next day the bait has gone and the footprints of a hedgehog and insects have been left behind on the white paper either side of the tray. Photos: DOC/Adrienne Grant.

See [www.gotchatraps.co.nz](http://www.gotchatraps.co.nz) for a guide to footprints, purpose-made tracking tunnels and self-inked cards.

# In parks and beyond . . .

In New Zealand we are fortunate to have a wide range of parks and reserves and enjoying the great outdoors is a huge part of our kiwi culture. Whether you are heading in to the forest, going for a stroll along a river or around a lake, or at the coast, you can turn your walk into an adventure by having a few ideas and activities up your sleeve.

## Listening to the forest *Whakarongo ana ki te ngahere!*

Going into a forest can be magical experience, far away from the hustle and bustle of urban noise; it is a place of peace and tranquillity and a chance to really connect with the natural world.

Lie down with your children on the forest floor and listen closely to sounds of nature. Close your eyes and count on your fingers all the different sounds you hear until you get to 10. Compare what you heard; how many different bird calls were there and how many could you identify? Did you hear the creak of the trees? Could you hear leaves falling to the ground? What else did you hear?



Listening to the sounds of the forest.  
Photo: [http:// fiordlandknaturediscovery.blogspot.co.nz](http://fiordlandknaturediscovery.blogspot.co.nz)



## Meet a tree\* *Tūtaki te rākau*

A well known game for groups of at least two: one person is blindfolded and the other leads their partner into the forest to meet a special tree. Encourage the blindfolded partner to explore the tree – what does it feel like? Is the bark rough or smooth? Get them to feel it with their hands and their cheeks. Are there other plants growing on the tree such as ferns, and lichens or rata vine? Can they put their arms around it? What does it smell like? How old do they think it is? Feel all the way around the roots of the tree. Once the blindfolded partner has explored the tree, lead them back to where you started, take the blindfold off and now ask them to find their tree with their eyes open.

Swap roles! (\* Joseph Cornell, Sharing Nature with Children; [www.sharingnature.com](http://www.sharingnature.com))

Meet a tree.  
Photo: DOC/Adrienne Grant

## Finding your own wild place

Get your kids to find their own special wild place where they can sit quietly for 5 or 10 minutes and just observe what is going on around them, both close up and more distant. They might find a spot under a bush or nestle at the foot of a giant tree. If they sit quietly enough they should notice insects moving around and may even have surprise visits from fantails, tomtits or robins, in the bush or seabirds at the beach.

Pre-arrange a meeting point and a signal such as a whistle. Mark the meeting place with a brightly coloured backpack or jacket that everyone can see from their special wild place so they don't venture too far away. Sound the signal when the time is up and share what you saw, heard and felt. Extend this activity by encouraging them to do some drawing of the special things they see - like leaves, seeds, flowers or shells; or they could use their imagination and write a short story or poem about how it feels being in their special spot.

## Water detectives

There's no denying kids love water! You can help them explore streams, wetlands and lakes by looking at all the special creatures that live in water - water boatmen, snails, backswimmers, caddisflies, worms, damselfly nymphs, dragonfly larvae, water beetles, koura, and even fish. The diversity and numbers of invertebrates present help to determine the overall health of the water.

Exploring life in waterways requires a bit of preparation and patience but can be incredibly rewarding. Set some clear ground rules to keep your children safe and prepared for the experience.

As a family, collect a container of water - what can you see? Drag your net or sieve through some aquatic plants or collect up a bit of sediment from the stream or pond bed. Look under some rocks? Is there anything there? Tip the collection into the water container and allow any mud and silt to settle. Use a paint brush, spoon or pipette to transfer any beetles, insects or little fish into smaller containers like screw boxes or ice cube trays (fill these with some clean water first). Get your children to draw the bugs they found. What else can they find out about them?





You can do a similar activity at the coast and explore the rocky shore at low tide.

Remember the basic rules: always tip any collection back into the water from where it was gathered, rinse out containers and wash hands.

You will need:

- A plastic container
- An old sieve or net with a tight weave (make a net out of an old pair of stockings and a stick)
- White plastic containers or trays (icecream containers are ideal)
- Smaller plastic containers or screw boxes
- Plastic pipettes
- Small paint brushes or a spoon
- A suitable identification/field guide might be helpful
- Paper and drawing materials.



Boys with dobson flies. Photo: DOC.

### ***Some useful websites for water investigations:***

[www.landcareresearch.co.nz/research/biocons/freshwater/](http://www.landcareresearch.co.nz/research/biocons/freshwater/)

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

[www.biodiversity.govt.nz/kids](http://www.biodiversity.govt.nz/kids)



Family at Leigh Marine Reserve. Photo: DOC/Danica Stent

# Get to know your native plants

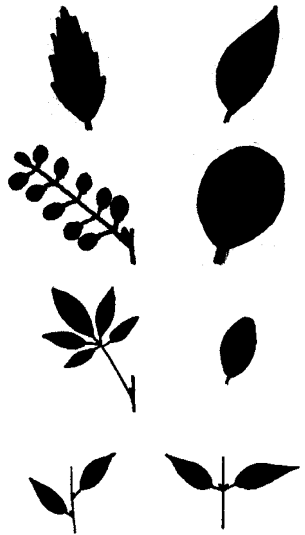
## Ākonga ngā ingoa o ngā rākau!

Try to identify one new plant each time you go for a walk in the bush. Start by noticing the difference in leaves. Some have jagged edges, some have smooth; some are narrow, some are oval, some are broad; some leaves are very small while some are long; some are hand-shaped.

Look at how leaves are arranged on the stem. Are they in opposite pairs? Or are they alternating along the stem? These features help with identification.

Some flowers and fruit are also easy to recognise:  
 kōwhai (yellow flowers in spring)  
 pohutukawa (red flowers in summer)  
 kōtukutuku (tree fuchsia)  
 tawa (large purple/black fruit)  
 dianella (native blueberry)

Make a list of the plants you know and keep adding to it. Here are some to get you started:



Kotukutuku. Photo: DOC/ Brent Tandy.



Pate. Photo: DOC.



Hen and chicken fern. Photo: DOC/Dick Veitch.



Lancewood, juvenile form. Photo: DOC/R. Stanley.



Horopito. Photo: DOC/Greg Martin.



Kahikatea Photo: DOC/ Adrienne Grant.



Parataniwha. Photo: DOC/C. Rudge.

## Nature treasure hunts - matching nature with colour

Everyone loves a treasure hunt and this activity is a great way for kids to focus their attention on the environment around them and observe the subtleties of the natural world.

- Obtain green, brown, red and cream paint charts (they are free) from a paint shop.
- Cut the paint squares out of the charts.
- Give a selection of colours to children in a bag.
- Allow 15 minutes or more for them to go collecting “things” from nature that match the colour squares e.g leaf, twig or flower.
- When the children bring their bag back, get everyone to gather around while the children place their “finds” in front of them and talk about what they have found.
- Stimulate discussion by asking questions such as what does the “find” **do** in the bush? e.g. a fallen brown leaf breaks down into compost on the forest floor.



Matching colours. Photo: Moira Cursey.

## Roadside or beach clean-ups

Make a difference and do a litter clean up. When litter is thrown away it doesn't magically disappear. Plastic can get caught by the wind and end up in waterways which eventually lead out to sea. Plastic is a very real problem for birds and marine life that mistake it for food or become entangled in it. As plastic photo-degrades it leaves toxic chemical residues in water.

Ponder these breakdown times:

- Plastic bag 10-20 years
- Tin cans - 50 years
- Plastic beverage bottle - 450 years
- Aluminium cans - 500 years
- Fishing line - 600 years
- Glass - 1000 years
- Polystyrene/ Styrofoam - never!

Remind your children that in nature, there is no such thing as waste, and there's no such place as 'away' to throw things - it all ends up somewhere! Encourage children to be responsible with their rubbish. Reduce the amount you create to start with by saying no to plastics and packaging where you can. For more about coastal cleanups - visit: [www.sustainablecoastlines.org.nz](http://www.sustainablecoastlines.org.nz)

For more about reducing waste - visit: [www.zerowaste.co.nz](http://www.zerowaste.co.nz)



Keep Gisborne Beautiful clean up. Photo: DOC/Trudi Ngawhare.

## Other ideas when out and about

Encourage your kids to fossick around in the leaf litter and also look under rotten logs for insects and decomposers and see what can be identified. Get the kids to think about what the creatures might eat and what might eat them?



A budding scientist. Photo: DOC/Adrienne Grant

Remember, it's ok to search and look for insects – but teach your children to handle them gently and put them back when they've finished. Instead of taking them home (where they will invariably die), suggest to your kids they draw them or take photos.

## Kiwi Ranger



Kiwi Ranger is a fun, interactive programme for kids of all ages - from 3 to 103! It helps you to discover the ecology, culture and history of some of our special places. To become a Kiwi Ranger, pick up one of the free activity books, full of fun things like scavenger hunts, "fill up your senses" activities, journal entries and word searches. Once you have completed your tasks you get a certificate and a Kiwi Ranger badge. Collect them all - each badge is different!

Kiwi Ranger is found at several places such as Arthur's Pass, Mt Aspiring, Paparoa and Nelson Lakes National Park, Orokonui Ecosanctuary in Dunedin and Denniston Historic Reserve. New sites are being created – check the website for one close to you. [www.kiwiranger.org.nz](http://www.kiwiranger.org.nz)

## *Blowing in the wind!*

This activity is from the Aoraki/Mt Cook Kiwi Ranger booklet but could be done anywhere! The weather is always changing and the clouds are your clues to what's in store tomorrow! Find a comfy spot to sit back or lie down and take it all in. Draw the different type of clouds you can see. Use your imagination to find weird and wonderful shapes.

What do you think the clouds are telling you about the weather? Write down your forecast for tomorrow and compare it with the forecast on [www.metservice.com](http://www.metservice.com)



## Planning your adventure

All trips go better with a bit of planning – whether it's a walk down the road or in a forest. If you're planning a walk in the back country, choose your walk carefully. Don't try and do too much. Think about it from your child's perspective.

### Be prepared:

- Wear practical clothes and footwear.
- Know the weather forecast and be prepared for it to change – have raincoats and warm clothes.
- Have some spare clothes to change into just in case.
- Always make sure you keep your kids well fed and watered and have a steady supply of snacks no matter how long you're going to be. Pack wholesome and filling food to sustain energy levels. A few surprise treats can help lift flagging spirits.
- Pack a first-aid kit. Make sure you have plasters for cuts and scrapes; antiseptic for minor cuts and antihistamine for stings and bites and of course, sun block.



A Kiwi Ranger. Photo: DOC/Sarah Mankelow

### Prepare your own adventure kit:

- Magnifying glasses and binoculars
- Bug boxes – these have magnifying lids to closely inspect what you find
- Sieves or nets for catching insects or looking at stream-life
- Identification or field guides - (NZ author Andrew Crowe has an excellent series of guides available from most book stores)
- Scarves for playing blind-fold games
- Paper and pens and pencils
- Camera
- Whistle
- Compass and a map
- A tiny trowel and toilet paper
- A plastic bag for rubbish

# Other resources

There are many organisations and places you can go for further information and support to engage your kids in the natural world. Here are just a few websites:

## **[www.doc.govt.nz](http://www.doc.govt.nz)**

From parks and recreation, to getting involved in conservation projects, to information about plants, animals and conservation, this site is your one-stop shop.

## **[www.doc.govt.nz/conservationweek](http://www.doc.govt.nz/conservationweek)**

DOC's Conservation Week website has a section dedicated to kids with activities, online games, links to videos and even an online course for identifying forest birds.

## **[www.kcc.org.nz](http://www.kcc.org.nz)**

Kiwi Conservation Club (KCC) is the junior section of Forest and Bird. They publish a regular magazine for children and most places around New Zealand have volunteer KCC coordinators that organise adventures and activities for young New Zealanders. The website has ideas and activities your kids can do in their own backyard.

## **[www.naturedetectives.org.uk](http://www.naturedetectives.org.uk)**

Run by the UK based Woodland Trust, this website has thousands of free games and activities to get kids exploring forests, trees and wildlife.

## **[www.landcareresearch.co.nz/education/insects\\_spiders](http://www.landcareresearch.co.nz/education/insects_spiders)**

This site provides information about insects and spiders that is especially designed for primary school students.

## **[www.sharingnature.com](http://www.sharingnature.com)**

Sharing Nature is a worldwide educational movement started by Joseph Cornell that uses experiential nature activities to uplift and inspire. The Sharing Nature website provides activities and tools for parents and educators to support playful and inspirational experiences with nature.

## **[www.sustainableliving.org.nz](http://www.sustainableliving.org.nz)**

A website with practical information and ideas for sustainable living.



Experiencing the outdoors. Top photos: DOC/ Shirley Slatter.  
Bottom photos: [http:// fiordlandknaturediscovery.blogspot.co.nz](http://fiordlandknaturediscovery.blogspot.co.nz)

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Children in tussock.  
Photo: DOC/Phil Knightbridge.