





ISSUE 60, SEPTEMBER 2014

Tēnā koutou e hoa ma - Hello Pollution Busters!

We hope you had a great term of learning at school and are now enjoying the holiday break.

In this issue we are going to look in our backyards and see who lives there – how they help (or don't help) our environment and how we can attract more... so get ready to get your knees dirty!

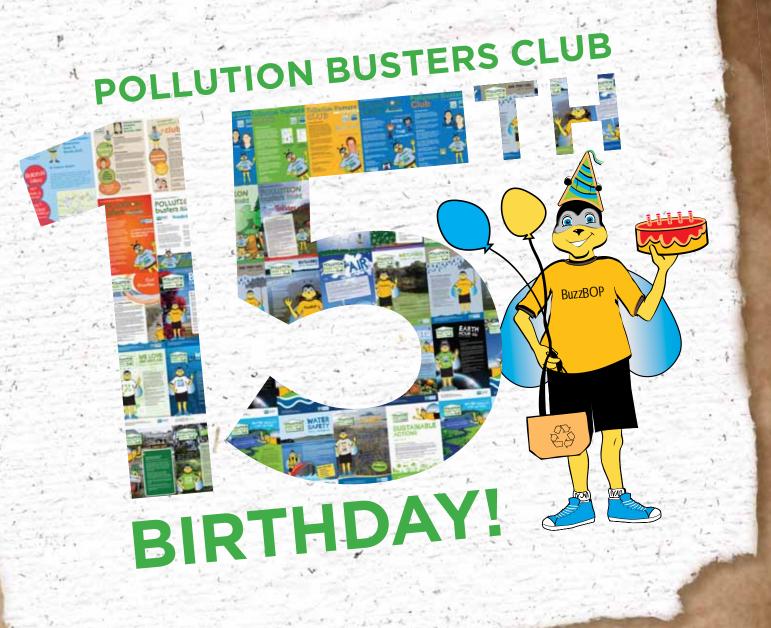
We are also very excited that it is the Pollution Busters Club's 15th birthday. That's 60 newsletters sent out to thousands of homes filled with your eco ideas, artwork, photos and stories. To celebrate we have an awesome competition for you to enter (see page 11).

Keep sending us your newsletter ideas, jokes, artwork and photos.

"Kia u, kia ngakaunui ki nga mahi pai"

Be steadfast and conscientious in all your good work.

From BuzzBOP and the team at Bay of Plenty Regional Council.



Send your drawings, photos, letters and competition entries to:

POST: Bay of Plenty Regional Council

Pollution Busters Club Freepost 122076 PO Box 364 Whakatāne 3158

EMAIL: buzzbop@boprc.govt.nz



Pollution Busters Club newsletter is a FREE quarterly publication for children aged 3-15 years old living in the Bay of Plenty with an interest in learning about the environment and sustainability.

Celebration time!

It's not only Pollution Busters celebrating a big birthday, this year the Bay of Plenty Regional Council is 25!

As caretakers of our land, air and water, Bay of Plenty Regional Council monitors the effects of human activities on our environment. They also promote the sustainable management of our natural

and physical resources for present and future generations.



and turned them into REGIONAL COUNCIL



pollution Busters Club timeline

1999

The first Pollution Busters newsletter - and its mascot BeeBOP from the BOP hive. '





2004

Pollution Busters Club (PBC) was growing fast and had a mini makeover.



BeeBOP

2005

The mailbag was full! BeeBOP was getting lots of art from members





2007

PBC had **3205** members!

2009

BeeBOP took a break and PBC got a new bee... Members picked the name 'BuzzBOP'.







2009-2010

BuzzBOP and the club got a new logo.



Lets get into the backyard and discover what lives there!

You may be surprised to find out that there is more there than you think there is.

We will look at the different types of birds that you could see and ideas on how you can help them in the spring and winter months. We will also look at the creepy crawlies that live in your backyard. You might not know it but some pests also live in your backyard, these can stop it being a nice place for

natives.



Go bird watching in this issue!

How many of these birds can you find?

Fantail / Pīwakawaka Bellbird / Korimako Silvereye / Tauhou NZ Pigeon / Kererū



Things to do in your sustainable backyard

- ✓ Collect rainwater to water the garden
- ✓ Compost
- ✓ Build a worm farm
- Feed the birds
- ✓ Get rid of weeds plant native trees and shrubs
- Make safe habitats for weta and lizards
- ✓ Plant an edible garden if you grow too many fruit and vegetables share them with your friends and neighbours
- Get rid of pest animals
- ✓ Make your own insect pest control for your vegetables (there are lots of recipes online using things like garlic and cayenne pepper)
- ✓ Turn empty toilet paper tubes into seedling planters - fill with soil and pop in a seed
- ✓ Make some recycled garden art, or recycled plant markers using stones, or old milk bottles

WORDFIND

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BEES BLACKBIRD **BUTTERFLIES** CATS **CENTIPEDE** CHAFFINCH **FANTAIL GRASSHOPPERS GREY WARBLER** KERERU

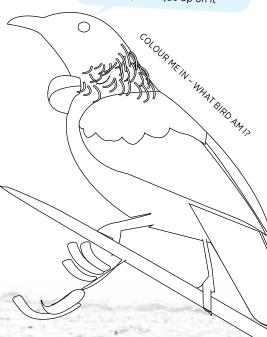
LADYBIRDS MICE **MOTHS** POSSUMS PRAYING MANTIS **RABBITS** RATS **SILVEREYE SLATERS** SLUG

SNAIL SPARROW SPIDERS STARLING STICK INSECTS **THRUSH** TUI **WASPS WORMS**

- A. Unique up on it
- a. How do you catch a tame bird
- A. Tame way unique up on it

Birds

Birds play an important role in your garden. They are a natural way to control pests such as insects. They help bees with the pollination of plants and they help with the spread of seeds. They also add to the natural 'music' in your garden! There are lots of different kinds of birds that come into your backyard. There will probably be a mix of native and introduced birds.



Here are some of the birds in BuzzBOP's garden. You may have some in yours too. Do you know which ones are native?



If you need help identifying the birds there are some really good websites that can help you like: www.nzbirdsonline.org.nz or www.landcareresearch.co.nz

ANSWERS: 4 tūī (N), 1 Song Thrush (I), 7 Starling (I), 5 Silvereye (N), 15 Sarlow (I), 6 Silvereye (N), 2 Welbrid (N), 11 Sparlow (I), 16 My (II), 17 Sarlow (I), 17 Sarlow (II), 17 Sarlow (II), 18 Sarlow (II), 17 Sarlow (II), 17 Sarlow (II), 17 Sarlow (II), 18 Sarlow (III), 18 Sarlow (III), 18 Sarlow (III), 18 Sarlow (III), 19 Sarlow (III), 19

Keep us safe! Feeders need to be up high out of reach of cats!

Enticing birds into your garden

Even if you only have a small space, a great way to get birds to come into your garden is to feed them! It's cool to feed birds all year round but the time that they need extra feeding is in the winter and spring. This is because there is less natural food around and birds use up lots of energy looking for food in the shorter and colder days.

So make your own feeder and get the birds in your backyard!

It may take about two weeks for birds to find the food but once they do they'll be lining up and waiting for you to serve them!

If you want pīwakawaka to visit your garden, plant native plants that will attract small insects. Also leave the leaf litter! Put it in piles under plants and it will attract the small insects they like to feed on.

Recycled milk bottle feeder

YOU WILL NEED:

- plastic milk bottle
- · bamboo or small sticks
- wire or string
- craft knife / scissors
- paints or pens to decorate
- wild bird seed (you can get this from the supermarket)

WHAT TO DO:

- 1. Wash out a milk bottle.
- 2. Outline holes ready to cut out on the two sides away from the handle (we have done one big one but you could do two one either side).
- 3. Cut out the hole or holes.
- 4. Decorate your feeder.
- 5. Put small holes below each opening and push in your sticks or bamboo for perches.
- 6. Remove the lid and wrap wire or string around the base of the opening and put the cap back on to make your handle or you could have an adult help you and drill holes for it to go through.
- 7. Fill with wild bird seed and hang somewhere you can see it!







There are a few foods that you should NOT feed birds. They are: Avocado, salt, kiwifruit, honey, anything mouldy or rotten.

Boy: I'd like to buy some

bird seed

Shop owner: How many
birds do you have?

Boy: None, I'd like to grow
some!

Bird Bread Pudding

INGREDIENTS:

- · About 800g lard or margarine
- 3 cups porridge oats
- 1 cup raisins
- · Handful of grated cheese
- · Handful wild bird seed
- Empty margarine or small yoghurt tubs

WHAT TO DO:

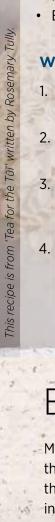
- 1. Gently melt the lard or margarine over a medium heat (get an adult to help you with this).
- 2. When the fat has melted mix in the oats, raisins, cheese and wild bird seed.
- 3. Combine the ingredients well then spoon into the margarine or yoghurt tubs. You could also mould them into shapes that will fit in your bird feeder.
- 4. Put the 'puddings' in the fridge to set and then take them out of the container and put them on the bird table; or put it in a netting bag and hang from a tree.

Easy bird tables

Make five holes (for any rain to drain) with a nail in the bottom of a foil pie tin (from the supermarket), then get an adult to nail it to a branch in a tree – instant bird table!

Get a piece of wood and hammer some nails into it, leaving them sticking up a few centimetres to secure bits of food to the table for the birds to eat (like bird pudding, apples or grapefruit cut in half). Have an adult nail it to a tree branch (out of reach of cats).







Who eats what?

Birds like fantail (pīwakawaka) and grey warbler are insect eaters - they like spiders, moths, beetles, and earthworms - leaf litter or mulch on the garden will attract insects, and birds are a natural way of keeping them under control.

Ruru (morepork) and kingfisher (kōtare) eat insects as well as mice. //

Tūī, bellbird (korimako) and silvereye (tauhou) all like nectar from flowers (win a nectar feeder by entering our competition on page 11) and fruit.

Kererū like fruit and foliage. They are one of the few birds that can eat large berries like the tawa, and because they fly long distances, they help distribute seeds throughout the forest when they come out the other end of the bird! This is an example of plants and animals depending on each other.



The praying mantis is a deadly hunter in the insect world. Our native mantis is under threat from the introduced South African mantis (pictured). Native adults have a big purple spot on the inside of each front leg.

There are lots of different bugs and crawlies that live in your garden. It's easy to be scared of insects (BuzzBOP's afraid of spiders). But of all the thousands of different insects in the world there are only a few that are harmful to us. Most don't affect us, and can safely be left alone. In fact, there are a number of insects and bugs that are helpful in our backyard. Some pollinate plants and some eat insect pests - very helpful indeed! Here are some that you could find in your garden... but there are lots more. Let BuzzBOP know what bugs are in your backyard!

Slaters are found in damp places, compost heaps. under bark and garden debris. Their favourite food is decaying plant matter, but they will eat root vegetables if the soil is dry.

Spiders belong to a group of animals called 'arachnids'. There are lots of different types that live in your garden. They make webs and eat insects and beetles.



Every garden needs pollinators and bees are one of the best (some birds are also pollinators - like tuī and bellbirds). Without them there wouldn't be as many flowers or fruits and vegetables.

The most common bees are the honey bee and bumble bee. Honey bees make the honey that we eat... yum! And they are BuzzBOP's cousins!

Worms are great to have in your garden because they eat decaying vegetation and aerate and mix the soil. Learn how they work by making a worm jar!



endemic beetle found in New Zealand.

Cicadas are the sound of summer! The boys make all that noise to attract a girl. They spend most of their lives underground. In summer you can find their old skins on fences or tree trunks.

Predators that eat cicadas include wasps, birds and even cats!

JOKE:

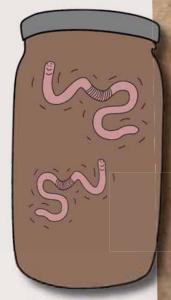
Why couldn't the cicada sing? He was a sick-cada (joke sourced from www.suzy.co.nz)

Make a worm jar

YOU WILL NEED:

- · Large glass jar
- Soil
- Earthworms
- Gravel
- Newspaper / black paper
- Fabric (old pantyhose are good)
- Food for worms (kitchen scraps - but not meat or onions)

This is a cool way to see what worms do in their natural environment.



In New Zealand we have two types of lizards – **geckos and skinks**. You can attract lizards into your garden by setting up a nice habitat for them. You can use some layers of cardboard, and corrugated iron separated by bits of branches to make them a great house.

Geckos and

skinks

Then plant things like flax, species with loose bark and/ or hollows like rata, totara and puriri or species that accumulate a skirt of dead foliage like tree ferns and cabbage trees.

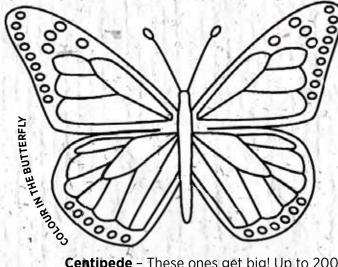
WHAT TO DO:

- 1. Put a small amount of gravel in the bottom of the jar.
- 2. Then put the soil in the jar and add the worms.
- 3. Add food on top of the soil.
- 4. Keep the soil moist but not wet.
- 5. Cover the lid with fabric to stop the worms escaping and let the air in.
- 6. Wrap paper around the jar to stop light bothering your worms.
- 7. Keep the jar in a cool, dark place.

Take a peek at it each day, Do you see worms and tunnels? How much worm food is at the top?

What is good about invertebrates? They provide food for other animals and return nutrients back to the soil.

Butterflies and moths – There are too many different types of butterflies and moths to list here. They look great in your garden but the caterpillars of some of these flying insects can be a pest in your garden.



Centipede - These ones get big! Up to 200 mm. They are New Zealand native and are found under stones and logs in the bush or garden. They are fierce predators, hunting and killing other insects, spiders and worms. Watch out, it has a painful bite.

Get creative - make fingerprint bugs and birds... send us your creatures!

Want weta in your garden?

Make a motel! It's a nice dry
place that weta can crawl into
and be safe from predators.

Check out the instructions
in PBC newsletter 54 Biodiversity (it can be found at
www.boprc.govt.nz/residents/kids/)

To find out more about the bugs in your backyard go to the Landcare Research website: www.landcareresearch.co.nz search: what is this bug?

It's a very cool website!



Attract the birds without planting pests!

Plant a tree! It is one of the best things you can do for the environment. Trees are big 'air cleaning machines', the more trees you have the better it is for air quality, and they provide homes and food for wildlife.

But not all bird attracting trees are good! Natives are best. Check out the Taiwan Cherry below – they attract the tūī but also spread and replace native bush.

Some natives you could plant for the birds:

- tī kōuka (cabbage tree) pōhutukawa
 - mānuka
- kōwhaipūriri
- N7 flax
- kakabeak
- kawakawa
- hebe

Get rid of a weed, plant me instead!



Taiwan Cherry is an invasive tree that is rapidly spreading in some areas of the Bay of Plenty. They are popular and known as "Tūī Trees" because they attract lots of native birds. But like the possum, what seemed a good idea has turned into a pest!

It has a fruit that birds love and so it is spread widely. If not controlled it will become a major problem as it replaces native bush areas. early in spring and provides food for tūī and other native birds.

tree that flowers

Kōwhai is an alternative



SEPTEMBER / OCTOBER 2014

Celebrates the diversity of the bird life in our local region. There are a wide variety of activities being held in the Eastern Bay for all ages to celebrate our region's wonderful environment and the work the local Care Groups are doing to help restore, maintain, protect and enhance habitats for our feathered friends.

birdsaplentyfestival.blogspot.co.nz for more information

Dont have space for big trees?

You dont have to plant a forest! Try growing plants in containers – some shrubs like kakabeak can grow well (but watch out for bugs, snails and slugs they love eating these plants).

Weedbusters

Weedbusters has a booklet 'Plant Me Instead!' to help you identify weeds in your garden and what friendly plants you can plant instead.

Go to www.weedbusters.co.nz for more details.





If you are in Whakatāne keep a look out for a new project called 'Whakatāne Halo'. It's all about providing a safe haven in our backyards and urban areas. So together we can all help our native wildlife to thrive.

Pest animals

Here are some of the pest animals that can cause damage in your backyard... can you think of some others?

Rats eat lots of different vegetation as well as preying on bird nests, stealing eggs and killing baby chicks.

Rabbits look cute and cuddly but they can wreck your garden! They will eat plants in your vegetable garden, dig holes in the soil, eat bark and small branches off shrubs/small trees and scratch the soil away from their roots. Rabbits can also badly damage your flower gardens.

Possums – Like rabbits, possums can look cute and cuddly but looks can be deceiving! They eat new shoots and leaves on trees and can kill them. They can also cause a lot of damage to your garden. They eat bird eggs and baby chicks. Possums are nocturnal (come out at night) and sleep in nests during the day.

Wasps eat the food of native birds, bats, insects and lizards.

Wasps also eat lots of native insects and have even been seen killing newly hatched birds. By eating so much, they upset the natural food chain of the forest.

Make a simple wasp trap from a soda bottle, there are lots of instructions to help you on the internet. Try searching for 'soda bottle wasp trap'. Send a photo of yours to BuzzBOP and we'll put it in out summer newsletter! That's when the wasps can ruin our picnics!

Cats - Pets or pests?

Cats can catch unwanted pests like rats and mice... but they can also catch native birds and animals which can make them pests themselves.

All cats can be a danger to native birds and animals... it's a good idea to put a bell on them and keep them inside at night.



HOW TO ENTER:

Draw a picture of your favourite native bird, and tell us why you like it.

Send your entries to BuzzBOP by 31 October 2014

buzzbop@boprc.govt.nz

POST TO: BuzzBOP and Team

Bay of Plenty Regional Council

Freepost 122076 PO Box 364 Whakatāne 3158

BuzzBOP's friend Mary-Anne Macleod

Chief executive - Bay of Plenty Regional Council

What do you do?

Good question...I work with the Councillors and staff to empower them to get on and do what we said we would do. I spend a lot of time with the other Councils, solving problems and working on tough issues (thankfully not too many of these). I also go to many important meetings and make big decisions... the list goes on.

What is the best part of your job?

Getting out with people in this council and seeing the difference we make on the ground. I love that.

How is the Bay of Plenty Regional Council celebrating its 25th birthday?

We will be having a BBQ lunch at the Whakatāne office and will be sharing some fantastic stories of our staff and their service to the Bay of Plenty.

What do you do to increase the biodiversity in your own backyard?

Steve (my very wonderful husband) and I are trying to improve a very steep hill on our place that has been a home for many pests like gorse, privet and Japanese honeysuckle - you name it we have it. We have killed heaps of weeds and planted a lot of natives. We are three years in so far and there is still so much more work to do. We love it down that bank as we are starting to see what it will become.

What is your message to pollution busters?

Keep it up! You do fantastic work!



Information for this issue was sourced and adapted from:

- www.boprc.govt.nz and previous issues of Pollution Busters
- Department of Conservation www.doc.govt.nz
- Forest and Bird www.forestandbird.org.nz

Bird images © Simple Designs

Do you have friends or family aged 3-15 years old and live in the Bay of Plenty?

Are they interested in learning about the environment and sustainability?

Get them to join the Pollution Busters Club by sending BuzzBOP the following:

Name, address, phone number, birthday and school.

Post to:

BuzzBOP and Team Bay of Plenty Regional Council Freepost 122076 PO Box 364 Whakatāne 3158

Email: buzzbop@boprc.govt.nz

