

Pupils from Kaponga Primary are pictured gathering invertebrates from the Kaupokonui River near Dawson Falls. The class studied the river whilst on camp at Konini Lodge with their teacher Teresa Jones. Previously they had looked at the same river as it passed through Kaponga and as a result were able to compare their results and make sound judgements as to the water quality at both sites. Excellent work.



## WHAT'S THE PLAN STAN? at Opunake Primary



Council Education Officer Kevin Archer talks to pupils at Opunake Primary School as part of the school's 'What's the Plan Stan?' civil defence emergency management programme. The programme included a visit to the Taranaki Emergency Management Office (TEMO) in New Plymouth. Thanks Opunake Primary, the background knowledge and the students' attitude and interest contributed to a very successful and enjoyable programme.

## CONGRATULATIONS Devon Intermediate 60 Springs programme

In 2008 Devon Intermediate, through its 60 Springs programme which is partly funded by the Taranaki Regional Council, was highly commended in the Taranaki Regional Council freshwater movie challenge. The school produced a DVD as part of the 60 Springs programme through Puke Ariki, where the students work alongside environmental experts as well as receiving mentoring in areas such as filming, photography and graphic design. Last year, the school won two further awards, one for being in the top 20 in the Outlook for Someday Sustainability Film Challenge, the other being a Ministry for Youth Development Youth Participation Award. The film is online at [www.theoutlookforsomeday.net](http://www.theoutlookforsomeday.net). For more information on the 60 Springs programme contact Nathan Hills at Puke Ariki (06) 759 6060.

## TRC Environmental Awards 2010

Now is the time to nominate your school, a class or a group for a Taranaki Regional Council environmental award. Last year, seven schools or school groups in our region were recognized for their outstanding environmental activities. Nominations close on March 31. More details and a nomination form are on the Council website [www.trc.govt.nz](http://www.trc.govt.nz) or contact Rusty Ritchie, Senior Information Officer ph (06) 765 7127 or fax (06) 765 5097.



## Waitoriki wins a Council Environment Award

Waitoriki school was presented with an environmental award in October for its environmental programme that includes waste minimization, composting, worm farming and school beautification through tree planting.



Pictured are pupils standing alongside the trees they planted on their first day at school.

## Professional Development 2010

### Rocky Shore (sessions 1 and 2)

Both sessions are suitable for all teachers  
Why - To investigate the animal and plant life that exists in the rock pools.

#### Session 1

- Bayly Rd lighthouse, Rahotu
- Wednesday 10 February, 4.00pm - 6.00pm

#### Session 2

- Kawarua Reef, New Plymouth
- Thursday 11 February, 4.00pm - 6.00pm

For further information on both of these sessions refer to the insert in this issue of SITE.

### Studying water quality down a river

This session is suitable for senior primary, intermediate and secondary teachers.

Why - To compare the water quality of the Kaupokonui river as it moves down the catchment from the mountain.

- Dawson Falls and Thoumine Park (Kaponga)
- Wednesday 6 May, 12.00pm - 4.00pm

### Biodiversity in Taranaki

This session is suitable for all teachers.

Why - To understand what biodiversity is, why ours is unique and what the Council and other organizations are doing to protect and enhance it.

- Taranaki Regional Council, Stratford
- Thursday 5 August, 1.00pm - 4.00pm

### The Patea River

This session is suitable for all teachers.

Why - To investigate the water quality of the Patea River as it passes through Stratford and to view some of the native fish that currently live in it and other waterways in our region.

- Patea River (Stratford) and the Taranaki Regional Council.
- Thursday 18 November, 1.00pm - 4.00pm.

All sessions are free and registrations can be made through the Council website [www.trc.govt.nz](http://www.trc.govt.nz) or you can phone Kevin Archer (06) 765 7127

## Answers from page 3

**Nature quiz** Match up 1.F 2.G 3.H 4.J 5.A 6.D 7.I 8.E 9.C 10.B

**The letter F** - The letter F appears 6 times in the sentence. You may need to look at how many times the word 'of' appears in the sentence.

**High tide/low tide** 1) 5hr.45min 2) 6hrs.05min 3) 5hrs.55min 4) 6hrs.50min 5) 5hrs.30min

**True or False** 1.true 2.false 3.true 4.true 5.false 6.false 7.true 8.true 9.true 10.false

For support with environmental education contact:

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Taranaki Regional Council  
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[www.trc.govt.nz](http://www.trc.govt.nz)



# SITE

Schools in the environment newsletter

## Welcome to 2010

Welcome back to the new school year with all the usual challenges and no doubt a whole host of new ones for teachers to deal with. A special welcome to teachers new to our region, I know you will enjoy teaching here. Make sure you get out and enjoy the wonderful resources that make Taranaki such a special place.

Last year was a busy and enjoyable one for me. It was especially pleasing to be involved with teachers and classes with whom I have had little or no contact in the past. Conversely, it was also valuable to revisit schools to work with people who have established a great working relationship with the Taranaki Regional Council and its staff. I hope this beneficial arrangement continues and is enhanced this year.

I have been asked to support many teachers with their 'What's the Plan Stan?' civil defence emergency management programmes. Usually the support comes in any or all of the following:

- A classroom lesson covering the importance of having a Home Emergency Kit and a Home Emergency Plan.
- A look at the disasters most likely to occur in our region, their potential damage and the need to be aware of and prepared for them.
- A class visit to TEMO (Taranaki Emergency Management Office). The latter has been particularly popular and feedback suggests that the adults accompanying the school groups learn every bit as much as the students.

The Council will be running the usual essay competition (see insert) to select the region's representatives at the Sir Peter Blake Youth Environment Forum to be held in the April school holidays in Wellington. While any selection process has its limitations, we feel that the essay competition gives us a really good chance of selecting the most suitable delegates. Taranaki has developed a great reputation at the forum by the quality of its representatives.

Congratulations to all the secondary students and their mentors who were involved in the various companies which took part in last year's Young Enterprise Scheme. 'T inventions' from Francis Douglas Memorial College won the Taranaki Regional Council environmental award. The company produced decorative items made from one hundred per cent recycled materials.

Best wishes for an enjoyable year, I look forward to working with many of you.  
Kevin Archer

## Umutekai and Lake Rotokare

This issue of SITE looks at Umutekai and Lake Rotokare which are significant natural areas suitable for visits from school groups. We look at what they have to offer visitors, how to set up a visit to either place, where they are located and why they are such special places.



## Seaweek 7 - 14 March 2010

Seaweek is an annual event which aims to increase our awareness and knowledge of New Zealand's special marine environment. Over the years, local organizations which have a relationship with the sea have worked together to arrange a series of activities or events prior to or during Seaweek. Many teachers use a rocky shore study as part of their Seaweek programme.

Some activities already planned are included with this issue of SITE:

- Two 'Explore the rock pools' teacher workshops
- A photography competition sponsored by the Taranaki Regional Council.

Further details can be found on [www.nzade.org.nz/seaweek](http://www.nzade.org.nz/seaweek)



# Umutekai and Lake Rotokare

*Two special places*

## What is Umutekai?

Umutekai is a swamp forest wetland and conservation area located between the headwaters of two small tributaries of the Waiwhakaiho River in north Taranaki. The site includes both privately owned and crown-owned land. The combined area is 49.4ha in size and contains the largest forest remnant on the lower ring plain. It has been identified as being both regionally and nationally significant in terms of its biodiversity values. Close to the Umutekai bush is an adjoining lake. The area is the only known site in Taranaki for the native fern *Deparia petersenii*.

## Umutekai and Lake Rotokare are Key Native Ecosystems (KNE)

Umutekai has indigenous biodiversity values of regional significance and is classed as a Key Native Ecosystem (KNE). It is one of 158 in our region, 114 of which lie partly or wholly on privately owned land, the remaining 44 being managed by the Department of Conservation (DOC). All Key Native Ecosystems have some form of regulatory protection from inappropriate use. Landowners have legally protected Umutekai through Queen Elizabeth II covenants. Similarly, Lake Rotokare is also classed as a Key Native Ecosystem (KNE).

## Eradication of pest animals

At Umutekai the Council operates an extensive programme aimed at removing animal pests completely from the area. Council officers initially use tracking tunnels to identify the animal pests found in different areas of the bush, followed by appropriate trapping and poisoning programmes.

A similar programme operates at Lake Rotokare which in addition is encircled by a predator proof fence.



## How to organize a visit to Umutekai

Umutekai is on private property and can be accessed only with the permission of the landowners. One of the landowners, Mrs Alison Rumball, will allow school visits to her property. You can contact Mrs Rumball on 06 755 0390 or Kevin Archer can do so on your behalf.

## How to get to Umutekai

From New Plymouth city, travel north on SH3, turn right into Smart Rd, left into Dorset Rd and then right into Umutekai Rd. From south, Dorset Road can be accessed off Egmont Rd.

## What you could do at Umutekai

A Council officer could accompany the group if available or required.

- A guided walk around the lake to identify the birds, plants and animals that are found there and why wetlands are so important.
- A walk into a small section of the bush to identify the native plant species. A class set of 30 mini guides to identify NZ Native Trees is available from the Council if required.
- An observational drawing session of the lake or bush area or small parts of either.
- Use the area as a base for language extension activities.
- Check on the invertebrates that use the lake as their habitat. The Council has identification sheets, trays, sieves, magnifying glasses and bug boxes available if required.
- Listen to a Council officer talk about Umutekai, its history and why it is such a special area.

## A visit to Lake Rotokare

For a visit to Lake Rotokare contact: Education Officer, Melissa Jacobsen Ph: 021 486 432  
Email: [educator@rotokare.org.nz](mailto:educator@rotokare.org.nz)



## How to get to Lake Rotokare

Lake Rotokare is 12km east of Eltham on Sangster Rd.

## What you could do at Lake Rotokare (from Term 2 onwards)

A study around the Rotokare Sanctuary Nature Trail could involve units such as:

Nature's recycling, Eco-detectives, Extraordinary Ecosystems, What is that?, A sensory Explosion, Stewardship heroes, Ko te tikanga Manaaki a te Maori I te Ngahere (Maori use of the forest), Plants are Cool and Wetland Treasure Trove.

**Related resources** - download from [www.trc.govt.nz](http://www.trc.govt.nz) or contact Education Officer

- TRC Wetlands unit
- TRC pond study activities
- TRC Trees in the Environment unit

## Pre-visit classroom lessons

Education Officer, Kevin Archer is available to visit your classroom. He will present a Power Point presentation outlining the importance of wetland areas. The Council's Biodiversity Officer could visit to provide background information about Umutekai.

# Junior Environmentalists Page



## High/low tide

On the clocks below, draw in the high tide and low tide times. Then see if you can work out the time between the high and low tides on each day.

1. High tide 10.30am - Low tide 4.15pm
2. High tide 12.10pm - Low tide 6.15pm
3. High tide 10.55am - Low tide 4.50pm
4. High tide 11.00am - Low tide 5.50pm
5. High tide 7.55am - Low tide 1.25pm



## Nature quiz - match up

Match the question or statement on the left with its answer on the right

- |  |                                |
|--|--------------------------------|
| 1 What is a Kanuka?                        | A. Flax                        |
| 2 What was Chew Chong Famous for?          | B. A jellyfish                 |
| 3 I am NZ's largest seaweed                | C. Cicada                      |
| 4 What is an orca?                         | D. Rifleman                    |
| 5 The most important plant for early Maori | E. Katipo                      |
| 6 Name NZ's smallest native bird           | F. A native tree               |
| 7 A major pest in NZ                       | G. Dairy farming and exporting |
| 8 NZ's most poisonous native spider        | H. Bull kelp                   |
| 9 A noisy insect particularly in autumn    | I. Gorse                       |
| 10 What is Aurelia Aurita?                 | J. A killer whale              |



## True or false

There are six true and four false statements listed below. See if you can work out which ones are false and which ones are true.

- 1 New Zealand's two largest living kauri trees are aged between 1200 and 1500 years.
- 2 New Zealand sea lions are very poor divers.
- 3 Lichens are the slowest growing of all plants.
- 4 Maori have never regarded sharks as a favourite food.
- 5 The largest insect in the world is the NZ giant weta.
- 6 Egmont National Park, created in 1900 was New Zealand's first.
- 7 The pohutukawa was greatly favoured by early European boat builders.
- 8 In 1773, Capt Cook brewed a beer from a mixture of rimu and manuka leaves.
- 9 Orange roughy live most of their lives in water so deep that it is pitch black.
- 10 New Zealand's two longest rivers are the Waikato and the Whanganui.



## Animal tongue twisters

See if you can say any one or more of these tongue twisters three or more times. If you can say all of them one after the other three times or more you are fantastic and you should look a for career as a newsreader.

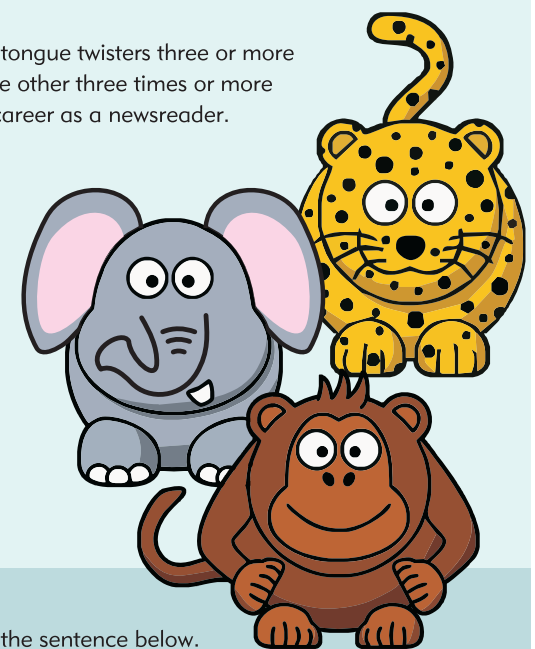
Elephants eat eight excellent Easter eggs every early evening.

Few freaky fish flip flop for fried frizzled French fries.

Monkeys make many marvellous marshmallow milk malts.

Lazy lizards lick limey lemons, leopards like lettuce layers

Purple poodles poke and paint purple people with purple paint.



## The letter F

How many times does the letter F appear in the sentence below.  
Clue - If you think there are three you are wrong?

**FINISHED FILES ARE THE RESULT OF YEARS OF SCIENTIFIC STUDY COMBINED WITH THE EXPERIENCE OF YEARS.**