

Welcome to 2014

Welcome back to another school year, one that hopefully will see you and your students achieving the positive outcomes that you desire.

In the latter half of last year we produced a study unit titled 'Bus transport in Taranaki'. Our original intention was to produce a mini unit, but we found that we had so much useful material that the finished product became a comprehensive unit. If you used the unit in any way last year, we would welcome your feedback by email, fax, phone or just by telling me when I next visit your school.

We will be releasing another study unit, 'The Rainforest School' at a teachers professional development session at Pukeiti on Thursday 20 February, (see insert in this issue). The session will benefit all teachers who are contemplating visiting Pukeiti with their classes either this year or beyond. The unit covers the wide range of activities at this beautiful garden and rainforest, 20 kilometres from New Plymouth.

2013 was a trial year for school visits to Pukeiti. We were thrilled by the response, as we hosted 25 schools and other groups throughout the year. We had a wide range of ability and age levels (from Year 1 to Year 13) to help us assess the activities. The teachers, students and accompanying adults gave us extremely valuable feedback which we've incorporated into the lessons in the unit. Thanks you so much to everyone involved.

Congratulations to Holly Tyrell (St Pius X School) and Bailie Bright (Opunake High School) who won the two \$50 Paper Plus vouchers in the biodiversity quiz in the last issue of SITE. And many thanks to all the teachers who took the quiz with their classes, and gave many of their students an opportunity to be a winner. The quiz was so well supported across all year levels that we'll be sure to include another one in a SITE newsletter this year.

Have a great term everyone and I look forward to working with many of you throughout the year.

Kevin Archer

Pukeiti
encounter the mystery

The Rainforest School

Pukeiti is a wonderful asset for our region and this issue of SITE highlights the many activities in our new study unit. As mentioned in the editorial, we trialed many of the activities last year and have fine-tuned some to better suit school groups. Additional activities have been included following feedback from many quarters.



These children are being given information about the flora and fauna on one of the walks at Pukeiti.

Pukeiti

encounter the mystery



Pukeiti is a world-renowned rhododendron centre, nestled in the rainforest between Mt Taranaki and the coast. It has an interesting history and through the efforts of countless volunteers we all can experience its biodiversity and uniqueness. The Taranaki Regional Council assumed ownership of Pukeiti on 1 July 2010, to secure its future for our region. Pukeiti is one of three regional gardens which the Council owns and operates, the others being Tupare (New Plymouth) and Hollard Garden (Kaponga).

Information for schools

Visiting times

Hours: School visits start at 10.00am and must finish by 2.00pm, the exception being the night-time observation of native freshwater fish which will start no earlier than 5.00pm. When deciding on the possible programme for their classes, teachers need to factor in short breaks for morning tea and lunch.

Cost: Entry to Pukeiti is free for all visitors, including school groups.

Adult to student ratio: The Council policy requires a 1:5 adult:student ratio for all Council-led field trips, including those to our regional gardens. Some flexibility can be used with high school groups.

Group numbers: All activities are suitable for class groups of up to 35 pupils, except Activity 7 which caters for groups of no more than 12 students.

Months available: School visits are welcome at any time of the school year. However, the Pioneer Camp study is only available in term one and some other activities may not be available in October or early November.

Bookings: To avoid disappointment, bookings should be made months in advance. For initial enquiries please contact Kevin Archer: Ph 06 765 7127 (wk) or 0274 524 154 (mob) Email: kevin.archer@trc.govt.nz

Clothing: Students should bring raincoats, old shoes, hats etc for all visits. Sunblock is recommended in the warmer months.

Food and drink: Students need to provide their own food and drink when visiting the Pukeiti Rainforest School.

Activities

The activities available are listed below with the suggested class levels and approximate times in brackets.



1. Light Rainforest Walk
All levels (45-60 minutes)



2. Wonderful Waterwheel and Covered Way Walk
Years 1-3 (30-40 minutes)



3. Terrific Trees and the Bush Canopy
Years 5-13 (60 minutes)



4. Flowers and Rhododendrons
Years 5-13 (60 minutes)



5. The Pukeiti Garden Rally
Years 7-13 (60-75 minutes)



6. Native Freshwater Fish
All levels (30 minutes)



7. Native Freshwater Fish and their Natural Habitat at Night
Years 5-13 (60-90 minutes)



8. Creepy Crawlies
All levels (60-80 minutes)



9. Pot a Plant at Pukeiti
All levels (30 minutes)



10. Strange Plant Adaptations
Years 7-13 (40 minutes)



11. Bird Adaptations and the Birds of Pukeiti
All levels (60 minutes)



12. Pukeiti - Encounter the Mystery
Years 5-13 (30 minutes)



13. Pioneer Bushmen Camp
All levels (45 minutes)



14. Puketewhiti Stream Study
Years 4-13 (60-75 minutes)



15. Taranaki Regional Council Pest Management Programme
Years 4-13 (45 minutes)





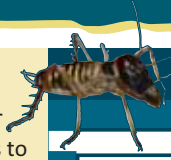
SECRET WORD

Answer the clues to find the secret word. After each clue you will see two numbers, the first is to tell you the number of the letters in the answer and the second tells you the letter in the answer that you need in the secret word.

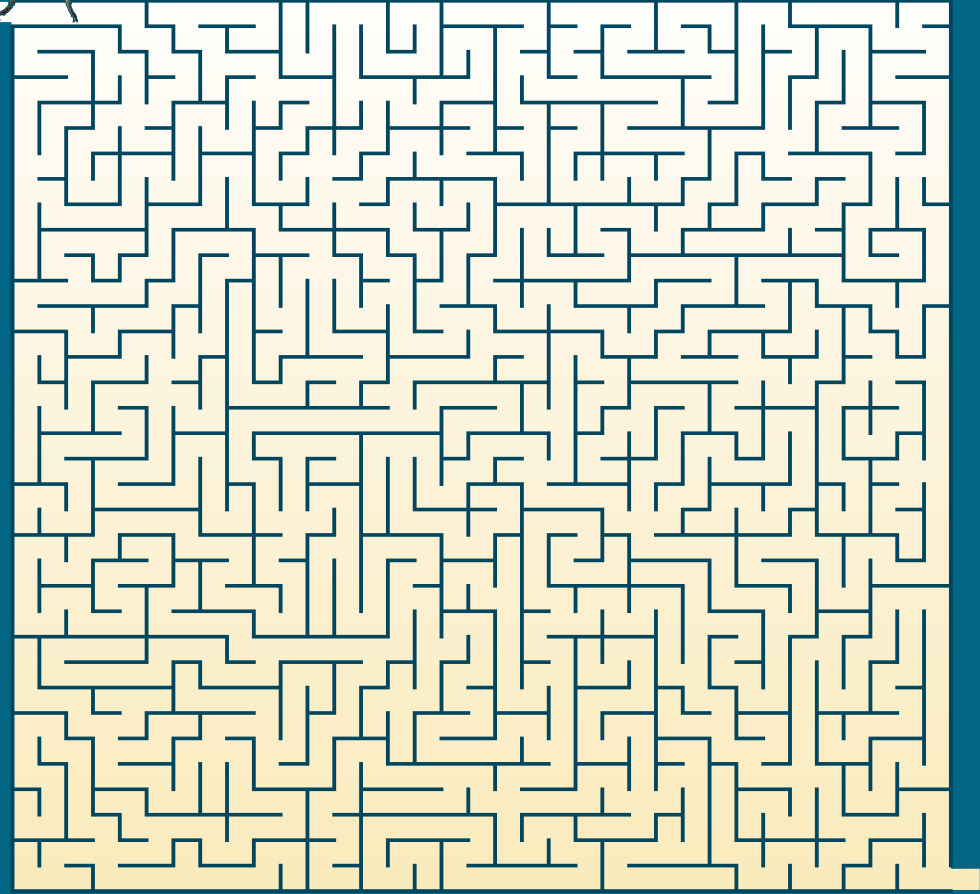
Here is an example. The clue: What is the capital of New Zealand? (10) (4).

You all know that the correct answer is Wellington which has 10 letters and the fourth letter in Wellington is l which is the letter you need to help you discover the secret word. Good luck.

1. A large, empty area. (5) (4)
2. New Zealand's largest lake. (5) (5)
3. A large city in Hawkes Bay. (6) (1)
4. Our largest island. (5) (1)
5. Taranaki's largest town. (6) (4)
6. A large area of trees. (6) (3)
7. Go backwards. (7) (3)
8. A late autumn month. (3) (2)
9. A type of vehicle, often large. (5) (1)
10. The world's most populated country. (5) (3)
11. A heavy weight. (5) (2)
12. 12.00am. (8) (4)



Maze Help Warren the weta to find his way home to his home



READING EXERCISE – Fill in the gaps with words from the list at the bottom.

..... is a asset for our and this newsletter some of the that are available to during a there. Students need to bring and lots of clothing as the area is known as a for reasons. There are lots of things to at this place and everyone should have a time. To make it even it does not cost one to enter.

good exciting mentions Pukeiti warm activities do better raincoats classes cent special wonderful visit fantastic region rainforest

WORD TARGET

How many words of four or more letters can you make from the term: **RIPARIAN MARGIN**. You cannot use proper nouns (names that need a capital letter) and you can only use the same number of individual letters as there are in the term itself or less. For example there are three letter 'A's in RIPARIAN MARGIN so you can use the following words: main as it has one 'a', again as it has two 'a's and agrarian as it has three 'a's but not abracadabra as it has four.

- | | |
|------------------------|-----------------------|
| 1-10 Good | 21-25 Excellent |
| 11-15 Very good | 26+ You are a genius! |
| 16 -20 Very, very good | |

HIGH TIDE - LOW TIDE

Here are the high and low tide times for Port Taranaki for the school week beginning Monday 17 February. On the clocks below draw lines from the centre to show the high tide and low tide times for each day.

As an extra for those who especially like mathematics (who doesn't?), a challenge could be to work out the exact hours and minutes between high and low tide on each of the days. Good for you if you detect a recurring pattern with the results.



Monday 17 February
High Tide 12.11pm
Low Tide 6.26pm



Tuesday 18 February
High Tide 12.43pm
Low Tide 7.00pm



Wednesday 19 February
High Tide 1.17pm
Low Tide 7.36pm



Thursday 20 February
High Tide 1.55pm
Low Tide 8.16pm



Friday 21 February
High Tide 2.39pm
Low Tide 9.01pm

Students from Geoff Walker's Year 10 class identifying some of the invertebrates that tell us so much about a river's health. This activity was part of the school's social science programme which also looked at Council functions in general and its highly successful riparian management programme. ▶



Bits 'n' Pieces

Professional development sessions

all sessions are from 4.00pm to 6.00pm

Rocky shore No 1 at Cape Egmont

Wednesday 12 February
Cape Egmont Lighthouse, Rahu

Rocky shore No 2 at Kawaroa

Thursday 13 February
Kawaroa, New Plymouth

The Rainforest School at Pukeiti

Thursday 20 February
Pukeiti Gardens, Carrington Rd, New Plymouth

Seaweeek 2014

Seaweeek this year is from 1-9 March. The theme this year is "Our fragile, finite Taonga." Further information can be found at www.seaweeek.org.nz

Rawhitiroa juniors at Kawaroa



There was plenty of excitement evident when the junior students of Rawhitiroa explored the Kawaroa rock pools in November. The visit was part of a busy day for the students as they also visited the coastal walkway and the zoo at Brooklands Park.

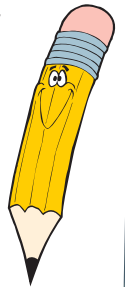


Holly is a winner!

St Pius X student Holly Tyrell is with Council Education Officer Kevin Archer at a school assembly late last year. As mentioned in the editorial, Holly and Bailee Bright (Opunake High School) both won a \$50 Paper Plus voucher by firstly getting a good result in the SITE biodiversity quiz and secondly by being lucky enough to have their names pulled out of a box containing over 50 other qualifiers. Well done Holly and Bailee.

Important dates

- **World Wetlands Day**
Sunday 2 February
- **International Day of Action for Rivers**
Friday 14 March
- **International Migratory Bird Day**
Saturday 3 May
- **Bike to Work/School Day**
Friday 16 May
- **World Biodiversity Day**
Thursday 22 May
- **World Environment Day**
Thursday 5 June
- **World Habitat Day**
Monday 6 October



NZAAE Conference - Christchurch

I recently had the privilege of attending the New Zealand Association of Environmental Educators (NZAAE) conference in Christchurch. While there were many highlights, the consistent theme throughout was the need for educators to acknowledge, nurture and promote the ideas of young people and involve them in environmental action, whenever possible.

Answers from page 3

Reading Exercise: Pukeiti, wonderful or fantastic, region, mentions, activities, classes, visit, raincoats, warm, rainforest, good, exciting, do, special, wonderful or fantastic, better, cent

Secret Word: The secret word is CONSERVATION as the answers are space, Taupo, Napier, South, Hawera, forest, reverse, May, truck, China, tonne, midnight.

For assistance or information on environmental education contact:

Kevin Archer, Education Officer
Taranaki Regional Council
Private Bag 713, Stratford

Ph: 06 765 7127 Fax: 06 765 5097
Email: kevin.archer@trc.govt.nz www.trc.govt.nz

Sacred Heart studies the Waiwhakaiho River



Megan Lilley's Year 8 class studied the Waiwhakaiho river in November at two sites along the river's course; the first near Egmont National Park and the second at the Merrilands Domain in New Plymouth. The hardworking, well mannered students gathered and assessed plenty of data, and used it all to compare the water quality in the Waiwhakaiho River to that of a river overseas. Thank you Megan and students for a lovely day.