

It's nearly Christmas!

I guess you hardly had time to catch your breath and are now back on the job facing another important term. At least you have the prospect of better weather, but we all know that is no certainty.

Congratulations to the 78 Taranaki schools and 62 early childhood education centres that registered and took part in the NZ ShakeOut earthquake exercise late last term. Of the 28,000 people who participated in Taranaki, over 21,000 were students in schools or early childhood education centres. I was greatly encouraged by your positive response and I thank you all for your involvement at whatever level you chose. Many schools used the exercise as a catalyst to examine their emergency preparedness.

1,336,338 New Zealanders registered which represents a phenomenal effort. NZ ShakeOut has been hailed as a resounding success by the Ministry of Civil Defence Emergency Management and at a local level by our Civil Defence Emergency Management personnel. We are always looking to improve and we would be grateful if teachers could assist us by filling in a short survey which can be found online at www.trc.govt.nz or through the hard copy inserted in this issue.

Terms one and four are often the busiest times for me for field trips, with many teachers taking advantage of the better weather to take their classes into the environment, mainly for river, coastal (usually rock pools) or wetland studies. With rock pool visits, low tide times need to be considered to make sure you can get to the rock pools. The best way to find the Taranaki tidal charts is at www.linz.govt.nz. Check the tides for Port Taranaki but be careful as the times listed are for NZ standard time. You need to add one hour during daylight saving months. Some bookings have already been made for rocky shore field trips for this term and also for term one next year, so if you would like my support, please contact me as soon as possible.

You may be aware that our professional development focus is on giving teachers direct and focused support at syndicate or full staff level. These sessions have been used to assist teachers with planning, so please get in touch if you have upcoming studies where you think we could support your programmes.

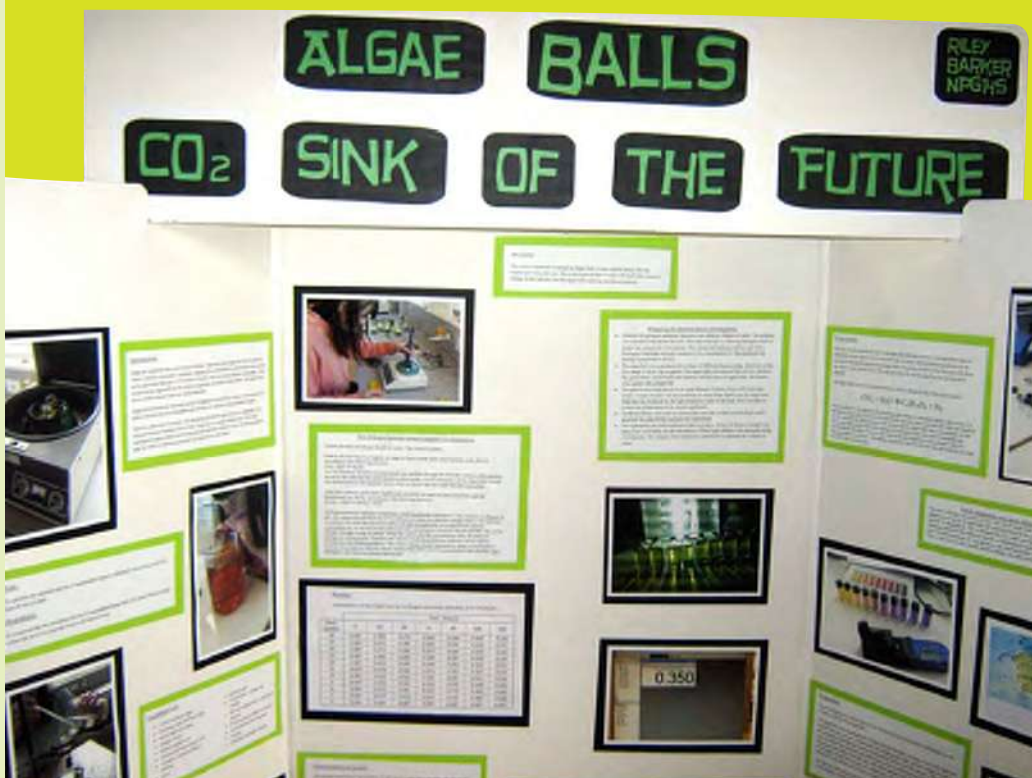
Kevin Archer



Barrett Lagoon

The focus of this newsletter is Barrett Lagoon in New Plymouth. It is an area often walked by locals and visitors, but informal feedback shows it is not greatly used by school groups. There is plenty to see there and it can be walked by people of all levels of fitness.

Science and Technology Fair



Once again the Science and Technology Fair showcased the extraordinary range of talents possessed by local students. Each year the Taranaki Regional Council sponsors prizes for displays that best exhibit aspects of environmental science. This year's winners were: 1st - Riley Barker (NPGHS) for her display titled *Algae Balls* (see photo above). 2nd - Alex Corrigan and Phillip Sanderson (Opunake High School) for their investigation into an electronic water diverter. 3rd - Renee Hanrahan and Teesha Smith (Inglewood Primary) for examining the differences between the rock pools at Bell Block and Kawaroa.

Barrett Lagoon

History

Barrett Lagoon was once named Rotokare, which means rippling waters. A Maori chief who lived at Kororako Pa, at the northern end of the lagoon gifted the land to a well known identity, Mr Dickey Barrett when he married the chief's daughter in 1828. After his death, the property was passed on to Mr Barrett's family. In the early 1900s one of his descendants, a Mr Honeyfield donated the land as a reserve to the people of New Plymouth.

Another benefactor, Mr Fred Cowling planted two hectares of his land in kauri trees in the 1940s. This is one of the largest plantations of kauri outside natural distribution. The Sir Victor Davies memorial plantings can also be found in the domain, they commemorate his years of service and association to the local nursery industry.

The lagoon is one of the few survivors of the draining of several such lagoons that characterised the landscape around New Plymouth prior to European settlement. An area between the lagoon and the Mangaotuku Stream contains a healthy semi-coastal forest remnant. This area survived the clearing of the land by the early settlers and also the Great Fire of Upper Westown in March 1888 which burnt 1,012 ha of land.



Tracks

There are several bush walks for you to choose from the most popular being the Rayward Bush Walk and the Lagoon Bush walk.

Many native trees can be seen from both tracks including kauri, pukatea, kahikatea, tawa, kohekohe and manuka with flax and raupo predominant plants around the fringes of the lagoon.

The area is a popular wildlife refuge and provides a perfect habitat for many of our native birds including fantail, keruru, pukeko and tui. Several species of duck can usually be seen on the lagoon itself or in the case of paradise shelducks in the nearby grassed area.



Council support with studies related to Barrett Lagoon

1. Use a walk round one or both of the tracks as a basis for studies in Social Sciences, Arts, English, Mathematics and Statistics or Science. Kevin can accompany your group to talk to your students about the history of the area, why wetlands are important and why areas such as Barrett Lagoon are such valuable habitats. There is an excellent area which can be used for lunch or morning tea.
2. Before you visit the area you could invite Kevin to show a wetlands PowerPoint presentation which outlines the importance of wetlands, how their clearance has contributed to the extinction of many native species and what efforts are being made by local people to preserve these areas.
3. Invite Kevin to help with a stream study to compare the health of Mangaotuku Stream as it flows through the domain with its health as it passes through New Plymouth city.
4. Ask for or download our wetlands unit at www.trc.govt.nz/study-units.
5. The lagoon could be used as a pond study to investigate the invertebrates that live there. We have a kit that you could borrow for this purpose plus a selection of data-gathering charts which you are welcome to use.





Tricky Quiz

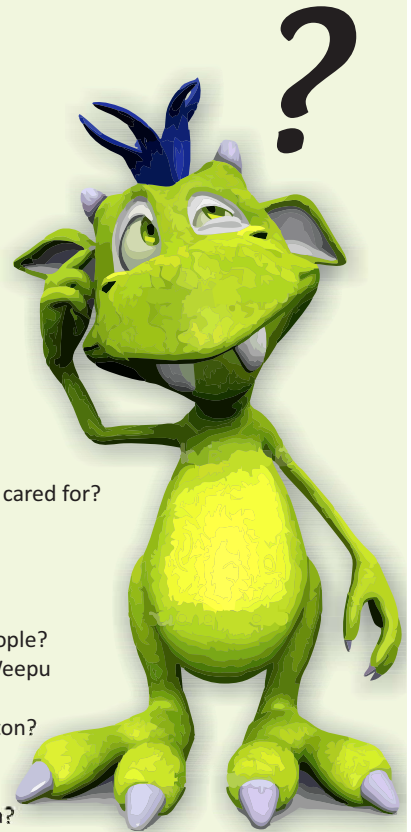
If you were happy with your score in the quiz, try this one because if you get any right at all you will be doing well, the answers are not as obvious as they seem.

- How long is 90 mile beach in Northland?
- What colour is orange blossom?
- What colour is the black box on an aeroplane?
- What is the lead in a lead pencil made from?
- What nation invented the kilt?
- American Bulldogs were first bred on what continent?
- How long was the 100 year war?
- What type of insect is the Velvet Ant?
- From what country did the French horn originate?
- How many people played in the band named 'The Thompson Twins'?

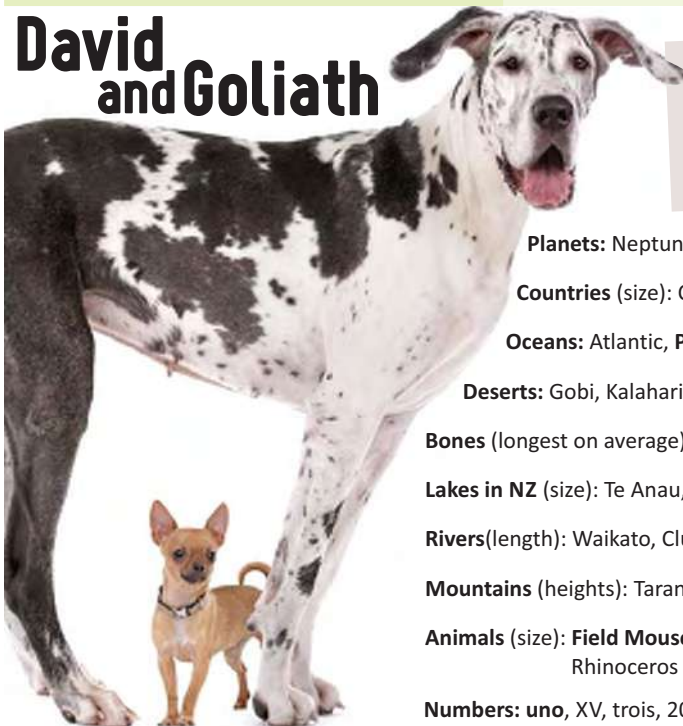
General knowledge quiz

Here is a chance to show others just how clever you are by getting 10 out of 10 in this general knowledge quiz. Actually if you get more than 5 out of 10 you will be doing ok. Good luck!

- Which of these towns is not in Taranaki?
A. Eltham B. Stratford C. Foxton D. Inglewood
- Which of these is a mammal?
A. A snapper B. an eel C. A kahawai D. An orca
- In what year was the Treaty of Waitangi signed?
A. 1820 B. 1830 C. 1840 D. 1850
- What is an animal shelter?
A. A place where animals, primarily cats and dogs can be cared for?
B. A place where animals can get out of the rain
C. Another name for a zoo
D. A place set aside for unhappy lions.
- Who is the odd one out amongst these famous sportspeople?
A. Kieran Read B. Maria Tutaia C. Dan Carter D. Piri Weepu
- What would you expect to find in the Beehive in Wellington?
A. Bees B. Politicians C. Scarecrows D. Pumpkins
- Which of these is the name of both a mountain and a sea?
A. Ruapehu B. Taranaki C. Tasman D. Red
- Who became famous for what he tried to do on November 5 1605?
A. Gilbert Fox B. Guy Fox C. Gill Fookes D. Guy Fawkes
- A Merry-Go-Round is
A. A type of circular, amusement ride B. A popular game at children's birthday parties
C. A spinning top D. A type of relay race where everyone gets dizzy
- When first introduced in 1908, the abbreviation S.O.S meant? (Be careful with one).
A. Save Our Souls B. Save Our Ship C. Smell Our Socks
D. None of them, it was just a morse code signal asking for help.



David and Goliath



Place these groups in order from the largest, longest or highest to the smallest. Clue - either the biggest or the smallest is in dark lettering.

Planets: Neptune, Earth, Jupiter, **Pluto**

Countries (size): China, USA, **New Zealand**, Canada

Oceans: Atlantic, **Pacific**, Southern, Indian

Deserts: Gobi, Kalahari, **Sahara**, Arabian

Bones (longest on average): tibia, **femur**, ulna, radius

Lakes in NZ (size): Te Anau, Rotorua, **Mangamahoe**, Taupo

Rivers (length): Waikato, Clutha, **Patea**, Whanganui

Mountains (heights): Taranaki, Dampier, **Tasman**, Messenger

Animals (size): **Field Mouse**, African Elephant, Blue Whale, Rhinoceros

Numbers: uno, XV, trois, 20

Did You Know?

That one of the world's most famous lagoons, the Blue Lagoon in Iceland, is not a lagoon at all. It is a man-made feature where water from a local geothermal power plant is pumped over a lava bed rich in silica and sulphur. These elements react with the warm water to create a bright blue lake used as a spa.

The size and depth of coastal lagoons often depend on sea level. When the sea level is low, coastal lagoons are swampy wetlands. When the sea level is high, they can look like coastal lakes or bays.

The city of Venice, Italy, is built on barrier islands and a coastal lagoon of the Adriatic Sea. In fact, Venice's nickname is "Queen of the Adriatic."

The billion-dollar tourism industry of the South Pacific relies on pristine beaches and bright blue lagoons. These atoll lagoons are also the site of some of the most intense debates about climate change and sea level rise.

Pupils in Melissa Burleigh's Year 7/8 class get down to business, classifying the waste at Inglewood Primary. This not-so-pleasant task enabled the students to gather data in order to write up a waste minimization and recycling action plan for the school. Great work Inglewood Primary.



Bits 'n' Pieces

Visit the TRC website

www.trc.govt.nz/education

Visit the Education page of our website to see local involvement in environment activities, resources for teachers including full and mini units plus previous issues of the SITE newsletter.

Professional Development

Mt Taranaki

Konini Lodge at Dawson Falls

Tuesday 4 December

See the flyer in this newsletter for details



'Drop, Cover and Hold' at Hawera Primary

Pupils in Room 6 at Hawera Primary took part in NZ ShakeOut on 26 September. All the pupils in the class responded swiftly to the call of 'Earthquake! Earthquake!' from their teacher. The class studied many types of disasters leading up to the earthquake drill itself.



They know the answers at Vogeltown School

Pupils at Vogeltown School respond enthusiastically to an 'earthquake question' from Taranaki Regional Council Education Officer Kevin Archer during their lesson in the school hall. The students were able to practise the 'Drop, Cover and Hold' routine in a situation where there are no tables to get under.



And at Frankley too

Pupils in Kim Cribb's year 5/6 class show they know what to do should an earthquake strike during school time.

Answers from page 3

General knowledge quiz: 1.C 2.D 3.C 4.A 5.B 6.B 7.C 8.D 9.A 10.D

Tricky quiz: 1.188km 2.white 3.orange 4.graphite 5.Ireland 6.Europe 7.116 years 8.wasp 9.Germany 10.3

Size matters: 1.Planets -Jupiter-Neptune-Earth-Pluto
2.Countries (size) -Canada-USA-China-New Zealand
3.Oceans -Pacific-Atlantic-Indian-Southern 4.Deserts -Sahara-Arabian-Gobi-Kalahari 5.Bones (longest on average) -femur-tibia-ulna-radius 6.Lakes in NZ(size) - Taupo-Te Anau-Rotorua-Mangamahoe 7.Rivers (length) - Waikato-Clutha-Whanganui-Patea 8.Mountains (heights) -Tasman-Dampier-Taranaki-Messenger 9. Animals (size) - Blue Whale-African Elephant-Rhinoceros-Field Mouse
10. Numbers - 20-XV -trois-uno

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

E-mail: education@trc.govt.nz
www.trc.govt.nz