



In November and December the Stratford High School Year 10 Social Science classes were actively involved in a series of lessons which covered some of the functions of the Council. All classes viewed a Powerpoint presentation in the Council's display room about what the regional council does to protect and enhance the environment. The second lesson was held in the pest management depot where a pest management officer outlined aspects of the pest management programme highlighted by a trap setting demonstration. Lesson three was in the Patea river looking at the river's health and the final lesson at the school outlined the benefits of the riparian management programme. The school has been involved in this programme for over 10 years.

A big thank you

It was heartening to read that a recent Colmar Brunton poll revealed that the majority of New Zealanders support environmental education in schools. Indeed the poll showed that more than nine out of ten New Zealanders agreed that all schools from early childhood to tertiary

level should include teaching about the natural environment and living in a way that preserves it for the future. A big thank-you to the hundreds of you who obviously agree with the findings in the poll and are committed to providing programmes that clearly endorse the views of the majority.

Sir Peter Blake Youth Enviro Leaders Forum - 2012

The ninth annual Sir Peter Blake Youth Enviro Leaders Forum will provide an opportunity for students to be selected for the Young Blake Expedition to the Kermadecs to learn more about this incredible area, and to gain the skills and experience required. To be eligible for selection as a delegate to the forum and possibly be selected for the Young Blake Expedition you must be:

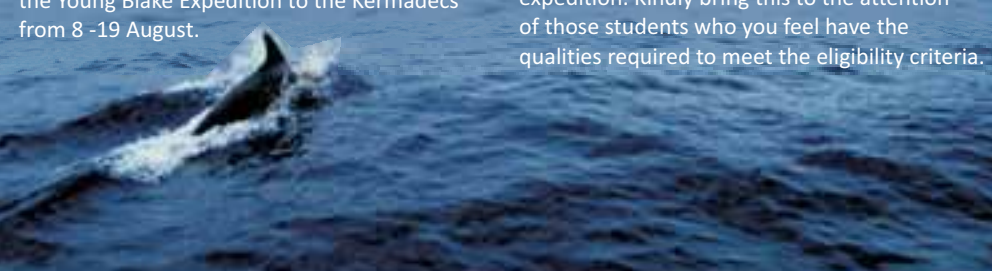
- 15 - 18 years of age at the time of application;
- A New Zealand citizen or a New Zealand resident;
- A student at a New Zealand secondary school;
- In good health with a high level of physical fitness;
- Able to demonstrate a passion for the environment and a contribution to New Zealand's natural environment;
- Able to demonstrate an understanding of the significance of the Kermadec Islands;
- Able to show leadership potential;
- Available to attend the Sir Peter Blake Youth Enviro Leaders Forum in Auckland from 15 - 19 April 2012;
- If selected, available to travel to the Kermadec Islands as a member of the Young Blake Expedition from 8-19 August 2012.



Applications close on Friday 2 March

Fifty delegates will be selected to attend the ninth Sir Peter Blake Youth Leaders Forum and from this group thirty will be selected to join the Young Blake Expedition to the Kermadecs from 8 -19 August.

The application form can be downloaded from www.sirpeterblaketrust.org It would be great if our region could be represented firstly at the forum and, for those especially lucky, at the expedition. Kindly bring this to the attention of those students who you feel have the qualities required to meet the eligibility criteria.



Bits 'n' Pieces

Environmental Awards 2012

Has your school been involved with a special environmental project or perhaps your students have done some outstanding environmental activity? If so, you should consider a nomination for a Taranaki Regional Council Environmental Award.

Nominations close 31 March 2012.

For more details or a nomination form, please contact:

Rusty Ritchie
Senior Information Officer
Ph: 06 765 7127 or Fax: 06 765 5097
Email: rusty.ritchie@trc.govt.nz
or go to the Council website

Professional development

Sessions coming up real soon

Rocky shore
Tuesday 7 February
4.00pm - 5.30pm
Kawaroa Reef, New Plymouth.



Wednesday 8 February
4.00pm - 5.30pm
Bayly Rd Lighthouse, Rahotu

See the insert for more details.

Special Days/Weeks/Months

Bike wise month: **February**
World Wetlands Day: **2 February**
Seaweeek: **3-11 March**
World Migratory Birds Days: **14/15 May**
World Rivers Days: **25 September**
Disaster Reduction Day: **10 October**

EXPLORE A WETLAND

Celebrate World Wetlands Day

Lake Rotokare
Sunday 12 February
10 am

Bring walking shoes



Answers from page 3

Multi Choice quiz: 1.D 2.D 3.C 4.A 5.A 6.B 7.B 8.D 9.A 10.C
Definition Match: 9, 8, 7, 6, 2, 4, 3, 5, 1
Hidden fish: 1.eel 2.carp 3.smelt 4.trout 5.rudd 6.kingfish 7.salmon 8.cod 9.bully 10.brill

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

Welcome back

Welcome back to another busy and productive year. We regularly review our programmes to determine which ones work well and which ones could be improved. As mentioned in the last issue of SITE we feel we can offer better professional support for teachers by being more involved at your syndicate or staff meetings. Already a number of schools have requested my attendance on their Teacher Only Days or at one of their first staff meetings for the school year. As in the past we will continue to offer teacher workshops at venues such as rock pool areas and Konini Lodge simply because they are always well patronized and obviously meet teachers' needs.

We continue to receive positive feedback about our website www.trc.govt.nz. Clearly teachers are finding it to be user-friendly and valuable. It is also evident that a large number of your students also find the website a valuable research resource. Thank you for encouraging them to make use of it in such a positive way.

Up until last year the Council was involved in the selection of Year 12 and Year 13 delegates to attend the annual Sir Peter Blake Youth Environment Forum which was held in the first week of the April school holidays in Wellington. Those who attended had a wonderful opportunity to meet like-minded young people from all over New Zealand, were involved in environmental projects and visited many special places. Last year the selection process was changed and the host city was switched from Wellington to Auckland. This year's forum promises to be even more exciting with a trip to the Kermadec Islands in the offing for many of those who attend the forum. On page four of this issue of SITE you will find more information about the forum and the expedition and how your students can apply for selection.

In 2010 the Taranaki Civil Defence Emergency Management group conducted a community exercise named 'Taranaki Blowout'. The exercise provided an opportunity for people to better understand our volcano and be ready to respond when it erupts. Feedback from the exercise generally was positive and many schools were heavily involved. This year there will be a nationwide exercise named 'Operation Shakeout' which will be held in September. Keep your eyes open for more information.

Regards
Kevin Archer

The Coast

The focus of this newsletter is the coast and what makes ours special. The unit The Coast - Te Takutai Moana is a useful resource for teachers who want to study the coast in more detail. It is available online or you can obtain a copy from Kevin if that is easier.

Seaweeek 2012 (3 March – 11 March)

The theme of Seaweeek 2012 is 'One ocean - too much love?' and explores the impacts now and into the future of the wide variety of uses we make of the sea. Seaweeek focuses on learning from the sea. It's about exciting and inspiring all New Zealanders to renew their connections with the sea. It's a time for all of us to get to know our ocean and its habits, characteristics and inhabitants better. Seaweeek comprises a wide range of events, activities, opportunities and competitions. For details go to www.seaweeek.org.nz



Teachers' day out on Mt Taranaki



A look at the Dawson Falls Visitor Centre, an opportunity to learn more about mountain safety, a chance to identify the invertebrates in a mountain stream, a bush walk, a close-up view of Dawson Falls, a chance to see what Konini Lodge has to offer and a big lunch were features of the latest teachers' workshop held in November. Ten teachers from four schools took part in the day's activities with all intending to investigate further use of the area with their classes. Everybody had fun and contributed to the success of the day despite nobody being brave enough to test the water at the foot of the falls.

Sometimes people are uncertain as to what actually constitutes the coastal environment and this is entirely understandable as definitions vary from region to region. In Taranaki, the coastal environment includes areas of rocky shore, cliffs, sandy beaches, dunes, marine protected areas, sub tidal reefs, river mouths and estuaries. It also includes the open sea up to 22 kilometres from the shore.

The Taranaki coastline is 295 kilometres long, much of it is rugged which makes a significant contribution to the region's distinctive character. People from within the region and beyond enjoy and appreciate the coastal environment. It is important that its special character is protected and under the provisions of the Resource Management Act (RMA) the Taranaki Regional Council has an important role to play to ensure this special character is maintained.

While areas such as Port Taranaki have been substantially modified and other coastal areas have come under pressure from development, generally speaking most of our coastline remains untouched from significant development.

The water quality in our coastal areas is generally excellent. There are several reasons for this such as the rise and fall of the tides, the reduction in the number of direct discharges to the sea and the improvement in waste treatment and disposal.

Many of us use our coastal environment for activities such as fishing, diving, swimming, surfing, wind surfing, walking, exploring and boating to name some of them. We enjoy having public access to the coast and this can often be provided by road, esplanade reserve, esplanade strips or by gaining permission from a landowner.



PHOTO: Sandra Hickey

Community planting at Stent Road



Fitzroy Beach is popular for swimming and surfing

The main influences on coastal water quality are from rivers discharging to the sea. They may contain urban stormwater, sediment, agricultural run-off or industrial wastes. The effects are most noticeable after heavy rain. The Council monitors water quality at recreational beaches during the bathing season. Generally speaking the water quality of our beaches is safe for recreational use and compares well to other regions in New Zealand.

Do sand dunes help protect our coast?

They most certainly do and although they cannot stop some sand from being lost to the sea by wave action they certainly have the effect of reducing the impact that waves have on the foreshore. The dunes provide a buffer between the coastal land and the sea, thereby helping protect it from erosion. By keeping out of sand dune areas people assist the dunes to carry out their important role.

Council support for teachers

The Council offers the support of Education Officer, Kevin Archer, for studies and staff meetings as well as educational resources on the Council website www.trc.govt.nz

- ★ Studies of coastal areas for most classes often centre around rock pool areas. Although most suitable times are already booked for this term there are a few still available as well as some others early in term two. A rock pool visit with Kevin's support is always preceded by classroom visits to ensure the students know the main purposes of the visit.
- ★ Our coastline could be affected by oil spills. Invite Kevin to talk to your class about how the region is prepared to deal with oil spills and perhaps see a Powerpoint presentation about the recent Rena oil spill off the coast of Tauranga.
- ★ Investigate what our website [www.trc.govt.nz/Coast -2](http://www.trc.govt.nz/Coast-2) has to help you with your coastal study.
- ★ Invite Kevin to read to your class the story 'Skalaska's New Home'. This is a delightful story about a young godwit, a recent arrival in New Zealand and her battle to stay alive. The story has a strong coastal, environmental message.
- ★ We have educational resources such as Life's a Beach, the Estuary Kit and Coasts and Us available for borrowing. All contain excellent activities for classes.

Did you know:

Currents carry huge volumes away from our region every year. Some has been found as far south as Manawatu and as far north as Northland.

Oakura School has now been conducting an annual beach clean-up for 39 years. Well done Oakura School.



Word find

Find the rock pool related words in the maze. They run in all directions up, down, diagonally or backwards etc.

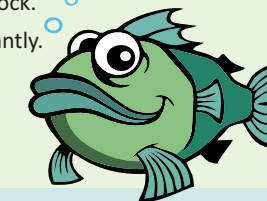
- Algae
- Anemone
- Bucket
- Coast
- Conservation
- Coral
- Crab
- Hermit
- Jellyfish
- Kina
- Limpet
- Mussel
- Octopus
- Periwinkle
- Reef
- Rockpool
- Sand
- Sandhopper
- Sea
- Seaweed
- Seaweek
- Spade
- Suckerfish
- Tide
- Towel
- Waves
- Whelk

P T T U T I M R E H L N
 K E E I T E O M U S O C
 E K R P D C P K I I O O
 E C E I T E I M T F P A
 W U P O W N E A I Y K S
 A B P M A I V W E L C T
 E U O U V R N G A L O O
 S G H S E F E K G E R W
 B C D S S H E D L J S E
 A A N E M O N E A E G L
 R O A L A R O C R P H W
 C H S I F R E K C U S W

Hidden fish

See if you can spot the name of the fish hidden in these sentences.

- The Scottish reel is a lively type of dance.
- Please keep the carpet clean.
- The aluminium smelter had to close down.
- The safest route out of town is via the main highway.
- A rudder is an important part of a boat.
- The kingfisher is a lovely native bird.
- Influenza, whooping cough and salmonella are very unpleasant illnesses.
- A good knowledge of the road code is essential for all drivers and cyclists.
- The crazy bull yelled and snorted its way round the paddock.
- He played brilliantly.



Coastal quiz

1. **An estuary is**
 A - the name of a month in French
 B - a saltwater lake
 C - an eddy in a river
 D - the tidal mouth of a river
2. **In New Zealand the best recreational beaches are awarded**
 A - red flag status
 B - green flag status
 C - yellow flag status
 D - blue flag status
3. **A fiord is**
 A - a wide arm of the sea between cliffs
 B - a long, narrow arm of the sea between two islands
 C - a long, narrow arm of the sea between high cliffs
 D - an inland sea
4. **Geographically a 'sandspit' is**
 A - a deposition landform found in coastal areas
 B - a large circular deposit of sand
 C - an area where the waves break continuously
 D - always found on high cliffs
5. **A breakwater is usually built to**
 A - break the force of the waves near a harbour
 B - block water from leaving a river
 C - withstand a tsunami
 D - protect water in a lake
6. **Mitre Peak in Fiordland is**
 A - the highest mountain in the South Island
 B - a very high sea cliff
 C - always covered in cloud
 D - named after a TV series
7. **The swash zone is part of the**
 A - onshore
 B - foreshore
 C - backshore
 D - not sure



Definition Match Match the definition to the sea creature and write the number in the square provided

<input type="checkbox"/>	Hermit Crab	1. Has long, sharp spines which help it to move
<input type="checkbox"/>	Paua	2. Has eight interlocking parts to its shell
<input type="checkbox"/>	Cats Eye	3. Has stinging tentacles to help catch prey
<input type="checkbox"/>	Limpet	4. A small fish with three fins
<input type="checkbox"/>	Chiton	5. Usually has five arms radiating from its body
<input type="checkbox"/>	Cockabully	6. Has a flat shell which sticks tightly to rocks
<input type="checkbox"/>	Anemone	7. Has a heavy, dark green shell with a special opening
<input type="checkbox"/>	Starfish	8. Popular kaimoana
<input type="checkbox"/>	Kina	9. Uses the discarded shell of other creatures for protection

Target word

How many words of three or more letters can you make from the grid below? each word must contain the middle letter. Can you solve the nine letter word?

L	I	S
Y	E	L
H	J	F

Goal: 1-5 good
 6-10 very good
 11+ brilliant!

