



Pupils from the Coastal Area School recently carried out a beach clean-up of the beach at Komene Rd near Okato. The clean-up followed a class lesson from TRC Education Officer Kevin Archer outlining the benefits of beach clean-ups. The school has 'adopted' the area which includes not only the beach but nearby Waikirikiri Lagoon.

Pupils are also researching and studying the area as part of the Puke Arika 60 Springs programme co-ordinated by Nathan Hills. Four squads are studying fish, land animals, birds/water chemistry and frogs. Taranaki Regional Councillors called in on one of the sessions and were given reports by students on what each of the groups had found.



Teachers study the Kawaroa rock pools

Taranaki Regional Council Marine Biologist Kate Giles, assists some teachers to identify one of the creatures in a rock pool during a teachers' professional development session at Kawaroa in February. Another session held at Spotswood Primary used the area named after former principal and passionate environmentalist Mr Mike Norris. Both sessions were very much 'hands-on' and my thanks go to the teachers who attended them. I am sorry that some of us got soaked but nobody seemed to mind.



Seaweek - Mobile Madness competition winners

Years 7/8
FIRST: Toni Marshall - Devon Intermediate who also won the people's vote prize.
2ND went to a pupil from Devon Intermediate (entry was Number 16).
3RD: Nicholas Jones - Devon Intermediate.
 Highly commended prize: Lilly Dingle - Devon Intermediate.

Years 3/4
 Room 11 at West End school won the class prize with Room 12 from the same school finishing second.

Essay Competition

In addition to the three winners mentioned on the front page, runners-up prizes of \$200 were awarded to Lucy Northwood from New Plymouth Girls' High School and Karen Hughes from Stratford High School. Congratulations to both girls.

Teacher Workshop

- **Biodiversity in the Taranaki region**
 Taranaki Regional Council
 Thursday 11 June
 1.00 - 4.00pm See insert for more details

Answers from page 3

- Match up**
 1.gosling 2.puppy 3.kitten 4.calf 5.lamb 6.elver
 7.kid 8.foal 9.cub 10.fawn
- Nature quiz answers**
 1.brown 2.black and white 3.iron 4.two 5.boar
 6.sperm whale 7.to sit 8.frogs 9. kohekohe
 10. huhu

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SITE

Schools in the environment newsletter

Education in, about and for the environment

A rather hectic first term is now behind us. It has been great to see the large and growing number of teachers involving their students in environmental studies. Furthermore, it is most encouraging to see teachers focusing student attention on education not only **in** the environment but also **about** the environment and especially **for** the environment. If you are a little perplexed as to what this actually means a simple progression might include:
in - a rocky shore study, **about** - classroom research eg a waste management survey and **for** - planning and introduction of a recycling programme.

I am sorry that I couldn't meet all requests for assistance in the first term but as you know one can't be in more than one place at a time. Bookings for this term are heavy so we will continue with our policy of first in - first served. Please note, I am not able to book a 'reserve day' for people to use in the event of inclement weather as this would be unfair on others. However, some schools have borrowed our equipment to run their own stream and rock pool studies. You can borrow these resources free of charge, so please feel free to request them. In addition we have a weather monitoring kit and some civil defence material to support the What's the plan Stan? resource that we are happy for you to use on request.

My thanks go to the Year 12 and Year 13 students who entered our environmental essay competition. Three delegates were selected to represent our region at the Sir Peter Blake Youth Environment Forum in Wellington (see photo). We appreciate the support of the teachers who encouraged their students to take part in the competition.

We conducted two successful professional development sessions in term one, one at Kawaroa looking at rock pools, the other at the outdoor education area at Spotswood Primary focusing on the pond and its surroundings. My thanks go to Spotswood Primary for allowing us to use their valuable resource. See page four for details on this term's professional development session.

Have an enjoyable term folks and I look forward to working with many of you once again.

Regards to all.
 Kevin Archer

Our Environment



We all must look after our environment for future generations to enjoy.

This issue of SITE looks at the Taranaki environment and how all sectors of the Taranaki community are working together to protect and manage the use of the land, fresh water, coast and air. The Taranaki Regional Council recently released a report which assesses the state of our region's environment. The report contains much good news for the people of our region, reveals solid progress on many fronts but does not ignore the many challenges for the future.



Sir Peter Blake Environmental Forum

Taranaki Regional Council Chairman David MacLeod, pictured with the three winners in the environmental essay competition. With him from left are Annelise Kuriger (Hawera High School), Kate Sole (Sacred Heart Girls' College) and Anne-Marie Petty (Spotswood College). By winning, the girls were able to represent our region at the sixth Sir Peter Blake Youth Environment Forum held recently in Wellington. As part of the forum, the students were involved in projects based around climate change, caring for our freshwater, and environmentally responsible business. At the end of the forum all projects were presented to parliamentary officials. Other highlights of the forum were visits to Te Papa and the Karori Bird Sanctuary. A wonderful experience for all involved.

Fresh water

Water quality in Taranaki is generally good despite agricultural expansion and intensification. As expected in an intensively farmed region the health of our rivers and streams does decrease from the source to the mouth, but our results show, over the last one and a half decades, water quality has either remained unchanged or has improved. Schools have contributed to this by getting students involved in stream studies, streamside clean-ups and in riparian planting programmes.

Protecting water quality

A major challenge we face is to lessen the impact of land use on water quality and a key to us achieving this is to restore the riparian vegetation along the length of our rivers and streams. This would mean fencing and planting along waterways that collectively could stretch from Auckland to Sydney and back again. Farmers are making good progress with over a million and a half trees planted in recent years.

Our coast

Our coastal water quality is excellent. Many schools are making positive contributions through beach restoration and/or beach clean-ups. During rocky shore studies, children, teachers and parents consistently make positive comments about the coastal environment.



Urenui estuary

Vogeltown school 'adopts' the Huatoki Stream

A group of Vogeltown school pupils are identifying invertebrates from the Huatoki Stream. The school has adopted the Huatoki Stream and in term one has used it as a resource for its extension programme for some Year 5/6 pupils. The programme, led by teacher Wendy Parkes, involves the children assessing the water quality at four sites along the stream course by looking at the stream habitat. They measured the water velocity, conductivity levels and pH, streambank vegetation, water temperature and clarity, and identified the macroinvertebrates that inhabit each area. After the data is collected and analysed, the group will then produce a PowerPoint presentation to interested groups including teachers attending a 'river adoption' professional development session in October. The school hopes to link up with at least one other school in the Wellington area which has embarked on a similar examination of its local stream. Great work Vogeltown School.

Tree planting is great

Many schools have been involved in tree planting exercises along stream banks, in coastal areas or within their own environment. There is no doubt that the planting of trees has had, and will continue to make, a hugely positive influence on the region's environment. Trees bring benefits for quality of life, climate change, farming productivity, water quality, shelter, summer shade, recycling nutrients, prevention of erosion, provision of resources and habitat to attract insects and birds.



The air we breathe

Gone forever are the school incinerators which were designed to burn virtually everything that was thrown into them. While they were a simple solution to getting rid of waste, from an environmental viewpoint they were disastrous. Schools have played their part by removing or not using incinerators to dispose of waste. Virtually all schools now have waste minimization and recycling programmes. The benefit to the environment is commendable.

Taranaki - Where we stand

Taranaki is on a sure and steady path to a more sustainable future, according to the new report assessing the state of the region's environment. It is important to note that the report, launched in the school holidays by the Minister for the Environment, the Hon Nick Smith, is based on comprehensive monitoring programmes established by the Council in the mid 1990s and has been running long enough to enable statistical testing of trends. The programme and results are based on solid scientific facts and measurements.

The full report has been issued to all intermediate and secondary schools as a reference resource for their libraries. Primary schools can request a copy of the full report. A smaller summary of the report is also available to all schools on request. Both the full report and the summary are now on our website www.trc.govt.nz



Beach Clean-up

Every year birds, seals, whales, dolphins and fish die needlessly because people throw rubbish into waterways, into the sea or leave it on the beach. Create a bar graph to show the amounts of rubbish collected on a recent beach clean-up.

| | |
|-----------------------|----|
| Cigarette butts | 86 |
| Plastic pieces | 74 |
| Polystyrene pieces | 60 |
| Plastic food bags | 27 |
| Pieces of paper | 99 |
| Pieces of glass | 17 |
| Plastic caps/lids | 56 |
| Drink cans | 88 |
| Plastic straws | 20 |
| Glass drink bottles | 45 |
| Polystyrene cups | 33 |
| Plastic drink bottles | 56 |

WORDFIND - Nature




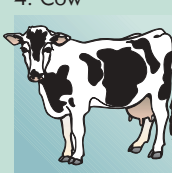

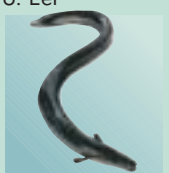




Find these words hidden below.

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 C L A H E F I D V E I U C A F N O A X W E U
 N W A E R E H P S O M T A S D R I B O G B V
 R D R N U R D K D A T Q O T R T E I E H X Z
 E T Z S T N E I R T U N Q U A L I T Y A G E
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- Animals
- Atmosphere
- Beach
- Biodiversity
- Birds
- Climate
- Coastal
- Creatures
- Environment
- Fern
- Habitat
- Kiwi
- Marine
- Native
- Nutrients
- Pasture
- Planting
- Preserve
- Quality
- Resources
- Rocks
- Sand
- Shade
- Shelter
- Soil
- Trees
- Vegetation
- Water

Match up - offspring

Find the name of the baby to match the adult. Many animals have more than one name for their offspring. The answers on the back page are the ones generally regarded as the most common.

| | | | | |
|--|---|--|---|--|
| 1. Goose  _____ | 2. Dog  _____ | 3. Cat  _____ | 4. Cow  _____ | 5. Sheep  _____ |
| 6. Eel  _____ | 7. Goat  _____ | 8. Horse  _____ | 9. Lion  _____ | 10. Deer  _____ |

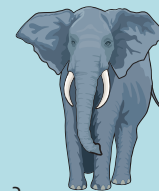
JOKES

What does a kitten become after it's three days old?
Four days old!



What happens when a cat eats a lemon?
It becomes a sour puss!

What do you get if you cross a fish with an elephant?
Swimming trunks!



Why are elephants wrinkled?
Have you ever tried to iron one?

Where do cows go on Saturday nights?
To the MOO-vies!



What do you call an elephant in a phone box?
Stuck!

What do you give an elephant that thinks it is going to be ill?
Plenty of space!

What is a crocodile's favourite game?
Snap!



What do get if you cross a crocodile with a flower?
I don't know, but I am not going to smell it!

What animal has more lives than a cat?
A frog, he croaks every night!

What happens when a frog's car breaks down?
He gets toad away!



Nature Quiz Time

See how many correct answers you can get.

- What colour are a zebra's black stripes during the first six months of its life?
- What two colours are a magpie's feathers?
- What mineral accounts to 35 percent of the Earth's composition?
- How many days can an ant survive underwater?
- What is the term for an adult male pig?
- What type of whale can dive to a depth of over 600 metres?
- What is the most common trick a pet dog can perform?
- What amphibians do you raise if you run a ranarium?
- What NZ native tree is sometimes referred to as 'our mahogany tree'?
- What NZ grub, when eaten, has a taste similar to peanut butter?