

My last goodbye

It is with pleasure that I can inform you that Dr Emily Roberts, a Marine Biologist at the Council has been appointed as my successor as Education Officer. Many of you will have met Emily through her work in a number of recent environmental projects including Project Hotspot and Dotterel Defenders. I have had the pleasure of working with Emily on a number of occasions, both in schools and out in the field and I have always been impressed with how easily she relates to people. Emily starts on 16 October and we will be working together throughout this term before she takes over completely in January.

If you thought last winter was wet you were right on the money. In August, all our monitoring sites recorded rainfall figures above normal with numbers ranging from 102% up to 217% with the average being 167%. Despite these figures we were still able to fulfil most of our planned field trips. Thanks to all involved.

You may have heard of the term 'Wild for Taranaki' without quite realising what it was or even what it meant. Wild for Taranaki was launched in 2016 and is made up of 27 community groups, organisations and agencies involved in conservation work in our region. As well as pooling information and co-ordinating the work of its own members, Wild for Taranaki administers the Community Biodiversity Fund, a funding pool available for biodiversity projects that support the trust's ecological priorities. Schools can become friends of the trust and can support Wild for Taranaki by promoting its activities as can individuals by wearing its caps and shirts. More information can be found at www.facebook.com/wildfortaranaki/

This term is almost fully booked and I will be working with a number of you for the last time before I call it a day in late December. Regardless of whether or not I will be working you this term, it has been a pleasure and a privilege to support you all with your environmental education programmes over the last 13 years. I have always believed that the people of Taranaki are lucky to have so many high quality schools in their region. However, the schools cannot function effectively without their dedicated, highly skilled and so often under-valued teachers who continue to amaze me by delivering outstanding educational programmes, despite ever increasing demands. You are all very special people!

Kevin Archer

Biasecurity & Biodiversity

This issue of SITE looks at Council programmes and strategies from our Environment Services Department, all of which are designed to preserve and enhance our beautiful natural environment.



WITT Taranaki Science Fair Awards

Whareorino School student Olli Single is congratulated by Taranaki Regional Councillor Charlotte Littlewood at a Science Fair award ceremony in New Plymouth. Olli's exhibit named 'Floody good mate!' won one of the Council's special prizes for projects that demonstrate a high level of environmental science.

Other award winners were William Hadley and Thomas Hadley from Francis Douglas Memorial College for their project named "Beekeeper's pest: Solution to Pollution" and fellow Francis Douglas Memorial College Student Felix Webby for his project titled "Palaemon's pH plight". Congratulations to the winners and to everyone who contributed to the fair.



Biosecurity & Biodiversity

The Council's Environment Services Department has two sections, namely Biosecurity and Biodiversity. Both sections work together on many programmes.

What is the difference between the two sections?

Biosecurity Section

This section's role is to control the unwanted organisms that live here or want to live here and by doing so cause considerable harm to our environment. The unwanted pests in Taranaki include 27 pest animals, 22 pest plants, and 4 pest fish. The control of all of them falls into three categories.

1. **Eradication** – This is the complete removal of the pest from Taranaki. An example is the rook, a crow-like bird that causes considerable damage to pasture. To the best of our knowledge we believe there are no longer any rooks living in Taranaki.
2. **Containment** – Where we feel that total eradication of a pest is not possible, we endeavour to reduce its numbers and to eradicate them altogether from certain areas. Our possum control programme falls into the containment category.
3. **Surveillance** – The surveillance category is mainly about education and advice. An example of this could be when an individual sees a pest fish such as a koi carp in a stream and contacts the Council for advice and guidance as to what he or she should do about it.

Controlling pest plants helps agricultural production and restoration of native habitats.



Biodiversity Section

This section is devoted to protecting and restoring native ecosystems. Loss of habitat and the effects of invasive plants and animals are the greatest threats to the region's remaining biodiversity. While all remnant bush, wetlands and dune lands are important, the Council has a voluntary process for identifying and restoring special areas called Key Native Ecosystems or KNEs. They have been assessed as having indigenous biodiversity of regional significance to Taranaki. In July 2017 we had identified 235 Key Native Ecosystems in the region, 193 of them being on wholly or partly owned private land. 88 have biodiversity plans to control pest plants and animals.



How we can help?

1. Kevin and or Emily can talk to your class about our Environment Services programmes.
2. Kevin or Emily can arrange for a member of our Environment Services team to talk to your class about pest animals and the methods we currently use to control them. We can bring along some of the 'stuffed animals' which are always a big hit.
3. We can lend you up to five tracking tunnels/inkpads/footprint sheets to help you identify the animals that visit your school/live in your bush etc. Kevin or Emily can give your class tips on how to set these up.
4. If you have a special area of natural habitat at your school, our Environment Services staff could talk to you about how to control pests.
5. You can download a variety of information related to both biodiversity and biosecurity from our website including study units, mini units and information sheets.





Reading exercise

Use the words listed here to fill in the gaps.

deer, eggs, people, mustelids, erosion, species, native, identified, vegetation, disease, birds, numbers, territory, Rabbits, 1880s, Seven

Stoats, ferrets and weasels, collectively known as were introduced in the Their introduction into NZ has been a disaster as they prey on many of our birds.damage pasture and crops and cause by burrowing into the ground. Magpies can attack who enter their during nesting times. Possums remain a huge pest as they eat truckloads of, can spread and eat native and their Argentine ants swarm in large.....and displace other ant species of have been as pests in our region.



Question time

See if you can answer the following questions. Most of the answers can be found on page 2.

1. Name the two sections that work together in the Council's Environment Services Department?
2. Our possum control programme falls into what control category?
3. What does KNE stand for?
4. How many species of pest fish do we have in Taranaki?
5. What pest bird species do we believe to have been completely eradicated from Taranaki?
6. The surveillance category of pest control is mainly about education and ?
7. In July, we identified how many KNEs in Taranaki?
8. What do you think the word 'remnant' means?
9. What are the two greatest threats to the region's remaining biodiversity?
10. Why is the Keruru one of the birds that our programmes are designed to protect?



1



2

Beautiful Taranaki

Taranaki is one of the most beautiful regions in New Zealand. Can you identify the following Taranaki attractions?



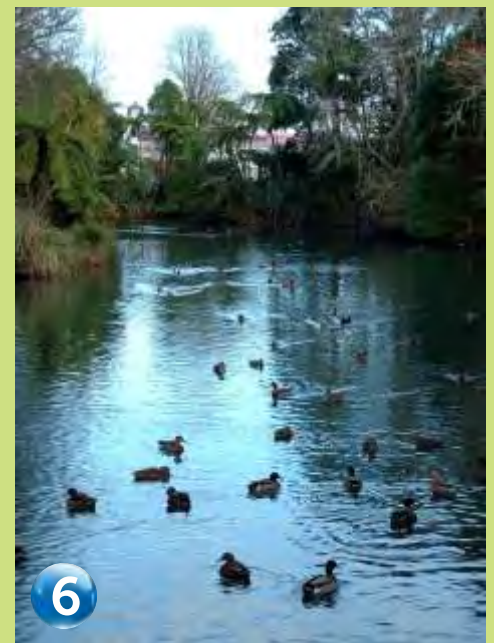
3



4



5



6

Woodleigh School uses its outdoor education area

Woodleigh School has developed a lovely outdoor education area close to the school. Last term, many classes spent time in the area learning about native trees, spotting native birds, removing some pest plants and studying the little stream that flows through it. Year 3 student Meg Biesiek is checking the clarity of the water during her class' stream study.



Welbourn School studies the Huatoki Stream

It's eyes down and looking as this group of enthusiastic Year 5/6 students from Michael Shearer's class at Welbourn School try to identify the invertebrates in the Huatoki Stream near the river mouth recently. Other classes studied the same stream at the Huatoki Domain and others looked at the Te Henui Stream close to the school.



Kaimata School's big day out

Kaimata School spent a fun-filled day visiting the Peringa Park wetlands, Lake Rotomanu, the Te Rewa Rewa Bridge and Fitzroy Beach recently. Parent Rachel Wightman and students Madison Leake, Isabelle Wightman and Leani Jones think about their answer to the treasure hunt clue at Lake Rotomanu while another group make its way through the rapidly changing landscape in the wetlands. Thanks Kaimata for a fun time, even the weather behaved despite the threatening clouds that hovered throughout the day.



Stratford Primary gets involved with King Edward Park

The year 7/8 classes at Stratford Primary have joined forces with the Taranaki Regional Council, the Stratford District Council and other agencies to help control pest animals and pest plants in King Edward Park which is adjacent to the school. Classes have been learning about animal pests and controlling techniques courtesy of classroom visits from Council Science Services Officers Tom Austin and Mark Nickel. They have also been on tours of the park and have been taught how to use tracking tunnels to identify the pest animals in the park. This valuable information has been fed back to the Council to ensure more effective control programmes. Great stuff Stratford Primary.



This and That

Answers from page 3

Reading Exercise: mustelids, 1880s, native, Rabbits, erosion, people, territory, vegetation, disease, birds, eggs, numbers, species, Seven, deer, identified.

Question Time: 1. Biosecurity and biodiversity
2. Containment 3. Key Native Ecosystem 4. 4
5. rook 6. advice 7. 240 8. remaining or left over
9. loss of habitat and invasion of pest species.
10. Because it is a native bird.

Beautiful Taranaki photographs:

- 1: King Edward Park entrance (Stratford)
- 2: Hawera water tower (Hawera)
- 3: Mt Taranaki
- 4: Te Rewa Rewa Bridge (New Plymouth)
- 5: Pukekura Park cricket ground (New Plymouth)
- 6: Victoria Park lake (Stratford)

For assistance or information on environmental education contact:

Kevin Archer, Education Officer
Taranaki Regional Council
Private Bag 713, Stratford 4352
Ph: 06 765 7127 Fax: 06 765 5097
education@trc.govt.nz
www.trc.govt.nz