

Not long until Christmas

With spring definitely here and summer not too far away, teachers' attention often turns to getting the students outdoors to learn more about this fabulous region we are so lucky to call ours.

Bookings for next term and indeed next year are already coming in and our policy of 'first in-first served' remains, which means some teachers may have to either accept a date and time that doesn't really suit or they might miss out altogether which is a shame. This is a fairly common occurrence with rock pool studies, particularly in terms one and four where proposed field trips can be affected by many issues including tidal time constraints. While you might miss out with requests for rock pool support, you are unlikely to miss out on a visit to the Rainforest School at Pukeiti, as we have plans in place for other people to be your hosts, should I be unavailable. Some Rainforest School programmes might have to be modified a little over the next two months as the gardeners work overtime to showcase the special place in all its beauty.

In recent years I have noticed a trend amongst many schools to focus their environmental education programme on a local resource or situation. This is commendable and such programmes often involve activities such as studying the local bush, investigating the health of a nearby stream, helping a local landowner to plant trees or even something as simple as observing the birds within the school grounds. There are a number of advantages with these kinds of studies including the minimal costs, less down-time involving travel, all important followup visits are easy to organize and they offer students practical hands-on experiences involving their local situation. Often the students get to see the fruits of their labour in front of their eyes, metaphorically and literally. Other themes that fit this approach are waste minimisation and recycling, studying a local wetland or an endangered species. If you are thinking of doing something along these lines please get in touch and I will try to support your programme.

Have a great term folks. Kevin Archer



The Taranaki self-help possum control programme

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The focus for this newsletter is the highly successful Taranaki self-help possum control programme. It examines why it was introduced, its success and how it is managed by land occupiers with the support of the Taranaki Regional Council.

Science and Technology Fair awards



SPECIAL

In this year's Science and Technology Fair, the Council first prize was awarded to Sam Parker (Waitara High School) for his exhibit titled 'Shaken Not Stirred' with Alesha Williams (Highlands Intermediate) gaining the runner-up award for her exhibit titled 'Soak Up That Oil'. Special congratulations to the two students and to all who took part in the highly successful fair.

The Aim Of This

Investigation Is To Examine

The Effects Of Seabed Mining And Sediment Dumping

On The Clarity Of Sea

Water And Seabed Levels

Self-help possum control

Prior to 1992, possum control in Taranaki was mainly carried out by volunteers, interested groups and private trappers and shooters whose main purpose was to make money from the skins and fur. As well as being a huge threat to native flora and fauna, possums have a major impact on farming with one third of their diet estimated to be pasture grasses.

Possums are known carriers of Bovine Tuberculosis (commonly called Bovine TB) and this disease represents a major animal health problem in New Zealand. Thankfully we have never had a major outbreak of Bovine TB in Taranaki but we did have a scare in 1992 when the disease was discovered in some herds near Rahotu. The discovery caused alarm bells to ring all over the region. The response from the Council, the Department of Conservation, from other agencies and from landowners was quick and decisive and ultimately lead to the establishment of the Taranaki self-help possum control programme.

Initial control area

It was decided that the best plan of attack to control the possum population would be to target Egmont National Park first to heavily reduce possum numbers through an intense combination of shooting, poisoning and trapping.

The 'buffer' zone joins the programme

The next area to be targeted was the area known as the 'buffer' zone which stretched from the national park boundary for one kilometre onto the Taranaki ring plain where most of the region's dairy farms are situated. Council officers held numerous meetings about the programme with land occupiers and to be effective a 75% buy-in from land occupiers was needed and this was quickly achieved in most areas.

More targeted areas

Once the programme was successfully established in the 'buffer' zone, the third stage was to target segments of around 15,000 hectares per annum until the programme was firmly established covering the entire ring plain around the mountain.





The self-help possum programme in action

Once an area had been selected for control the initial possum control was carried out by the Council's pest management officers, now called environment officers. This early control was very intensive and involved a combination of poisoning, trapping and shooting to bring the possum population in the area down to 5% or less. From the early 2000s this initial control programme has been done by private contractors to allow Council Officers to monitor and maintain the programme. When possum numbers had been brought down to below the 5% threshold, the 'self-help' part of the programme means that landowners are responsible for keeping possum numbers down with some assistance from the Council.

How you can help

If your property is in a possum control area, keep an eye out for possum bait stations and take extra care of your dog. Dogs are in danger if they eat some poisons designed for possums or even the poisoned possum itself.

New Plymouth city joins the possum control programme

With the self-help programme established and running well, the Council and the New Plymouth District Council (NPDC) have joined forces on a programme for the New Plymouth city area. The NPDC has been involved with possum control in parks, reserves and walkways for many years. But the new programme involves both the councils and, most importantly, the residents in the target areas. It is an entirely voluntary programme where residents work with skilled contractors to choose a safe and efficient control method for their properties. Signs have been displayed to advise the public of the area to be controlled, control methods and precautions they need to take. The Council met all costs of the initial control on private properties and continues to support residents in the programme to maintain possum control in the area.

Residents should start to see increases in native bird numbers, insects and other native animals such as lizards. They should also see more verdant and flourishing vegetation with less possum damage to gardens and orchards throughout the city.

How we can help

- Download the "Why not do a possum study?' and the 'Pest Animals' study units from the Council's website.
- Contact Kevin to arrange for a Council Environment Officer to talk to your class about the Taranaki self-help possum control programme and/or the New Plymouth community possum control programmes.
- Include a 'Taranaki self-help possum programme' and /or the 'New Plymouth community possum control programme' lesson when you visit the Rainforest School at Pukeiti.

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Graphing

A farmer with a pest problem goes hunting over three days and three nights. Graph the results of his results on a stem-and-leaf, or composite bar graph.

	Monday	Tuesday	Wednesday
Possums	6	4	5
Rabbits	7	5	8
Goats	3	1	2
Stoats	5	5	8
Weasels	2	0	0
Hare	1	0	0
Ferrets	3	1	1

Dictionary

Find out the meaning of the following words that have some link with possums.

nocturnal joey introduced buck flora fauna predator marsupial habitat eradicate



Research Activity

Possums were first introduced into New Zealand from Australia in 1837 by people who wanted to make money from their fur.

Use your research skills to find out how, when, why, and from where other pest animals such as ferrets, stoats, weasels, goats, rats, magpies, rooks, rabbits and hares arrived in New Zealand.



Bumper competition

Write a slogan for a bumper sticker to make the public even more aware of our most serious animals pest, the possum.

Make it something short and catchy. For example:

Stop Possums before it's too late OR

Possums Prey on Paradise





Entries can be emailed to kevin.archer@trc.govt.nz You can even send in a whole class set at once. Prizes 1st \$30 book voucher 2nd \$20 book voucher 3rd \$10 book voucher We will also make a class set of the winning entry. Good luck.

True or false

- 1. Possums are regarded as pest animals in every country in the world.
- 2. One of the reasons possums have thrived in NZ is that they have no natural enemies, except humans.
- 3. One of the diseases possums are known to carry is whooping cough.
- 4. Possums are marsupials.
- 5. Possums prefer to sleep at night and hunt during the day.
- 6. Possum fur can be made into lots of garments including very warm socks.
- 7. Playing possum means pretending to be asleep or even dead.
- 8. A male possum is called a Bill.
- 9. A female possum usually gives birth to one baby each year.
- 10. Poisoning is an effective way of keeping the possum population under control.

Fill in the gaps

Taranaki fur destructive money ineffective methods Select a word from the list known volunteers flora estimated fauna private to the right to fill in the gaps. We have for a very long time just how possums can be. We have also known that most to control them in the past have been largely As well as being a major threat to native and possums have a major impact on farming with one third of their diet to be pasture. Prior to 1992, possum control in had been carried out primarily by interested groups and shooters whose main purpose was to make some from the

TRUE

site

Waste audit at Te Pi'pi'inga Kakano Mai Rangiatea

These students seem to be happy in their work sorting out the waste at their kura. The students and teachers have big plans in place to improve their situation including a massive waste reduction programme, planning and developing a school garden and visiting the local transfer station and landfill.





You are never too young to learn as these focused four year olds demonstrate at Opunake Kindergarten last term. Many great things are happening there and this group of young people are open to ideas to make even more. Well done Opunake Kindergarten.

Marfell School studies the Huatoki Stream



Two classes from Marfell School recently had a fine time studying the Huatoki Stream at a site near to the Huatoki tennis courts. As the photo demonstrates the students were very keen and are pictured intently identifying some of the many invertebrates they temporarily captured from the stream.

This and That

Staff meetings

If you would like to learn more about how we can support your environmental education programme please contact Kevin at the Council phone 06 765 7127 or

email kevin.archer@trc.govt.nz Meetings take no more than half an hour and recent feedback from teachers has been very positive.

Taranaki Regional Council website (www.trc.govt.nz)

Visit the Education page of our website to download study units, mini units, previous SITE newsletters and to see photographs of local involvement in environmental activities as part of school programmes.

Send in a photo

I know the first thing many teachers do when they first get their hands on a SITE newsletter is to look on page 4 which always includes photos of students learning about our environment. If you have photos of your class or school participating in environmental activities, with or without my support, please send a copy to me, and I will feature it in a future SITE newsletter, if possible.



'Soak Up That Oil' scoops second prize at Science and Technology Fair. This exhibit by Alesha Williams (Highlands Intermediate) gained the runner-up award for her exhibit titled 'Soak Up That Oil'. Well done Alesha.

Answers from page 3

True or False

1.False 2.True 3. False 4.True 5.False 6.True 7.True 8.False 9.True 10.True

For assistance or information on environmental education contact:

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