

Term four is here already!

I hope you all managed to get some rest over the last fortnight after what seemed to be a very wet term three. I am sure there were many times when you wondered if the wet weather was ever going to end. You had good reason to think that way, as according to Council records all of our rainfall sites recorded figures well above their averages for the three winter months. Our site at Patea recorded rainfall figures that were 167% above its average amount for those months, yet it was still the driest of our 27 rainfall monitoring sites around the region. Perhaps you could spare a thought for the people working in the Dawson Falls area, as a staggering 2,723mls of rain fell at that site over the winter period.

Congratulations to the 55 schools, 51 early childhood centres and the one tertiary education centre in Taranaki that have registered for New Zealand Shakeout 2015. At the time of writing 1.1 million New Zealanders are registered to take part, which is a great effort. Congratulations to the educational institutions that regularly plan and practice earthquake and fire drills.

Congratulations to Quintin Sofeni Calder (St Pius X School) and Max Priest (NPBHS) who each won a \$50 Paper Plus voucher in the quiz in the last issue of SITE. My thanks to the teachers who took the quiz with their classes and then kindly sent me the names of some of their students who did particularly well. It was obviously a popular activity as we finished up with 61 names in the draw.

The annual Fonterra Science and Technology Fair attracted a huge number of exhibits as hundreds of students showcased their skills.

Congratulations to everyone involved, including the hardworking committee, the judges and especially the students. The Council sponsors prizes for displays that best exhibit aspects of environmental science. We awarded four prizes this year to the following students, Tyson Blackbourn-Kingi (Manukorihi Intermediate) for his exhibit named 'Gambusia along the Mangahinau Stream'; Fletcher Moles (NPBHS) for his exhibit 'Super Sand'; Meyer Neeson (Sacred Heart Girls College) for her exhibit 'O Rocks' and Amirah Osama (Spotswood College) for her exhibit 'Compost! Why Bother?' Special congratulations to the four prize winners.

Kevin



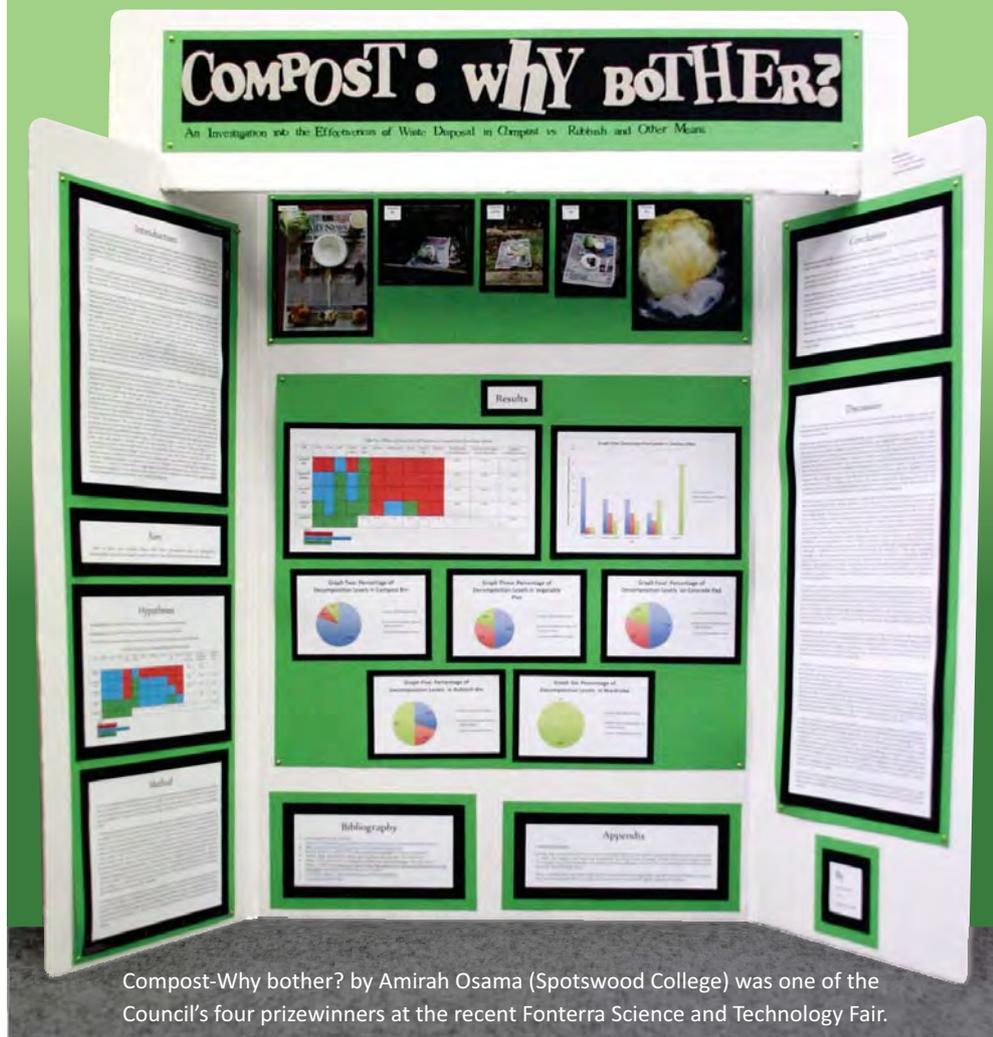
If there is one topic that nearly everyone feels comfortable to talk about, it is the weather. This SITE looks at our weather, how the Council monitors and records it, where weather forecasts can be found and how, to some degree, the weather affects almost everything we do.



Environmental Award Winners 2015

On Thursday 29 October, the Council will be holding its annual environmental awards presentation to acknowledge the outstanding work by individuals, community groups, companies and educational institutions. 15 awards will be made this year including three to educational institutions. Congratulations to the students, staff and communities involved.

Fonterra Science and Technology Fair winner



Compost-Why bother? by Amirah Osama (Spotswood College) was one of the Council's four prizewinners at the recent Fonterra Science and Technology Fair.



Weather

The Tasman Sea and of course, Mt Taranaki have huge influences on our weather.

Taranaki's climate has been described by 'experts' as usually sunny and windy with mainly mild conditions and regular rainfall throughout the year.

Rainfall figures vary around the region with the driest area being a narrow coastal strip with 1400mm to 1600mm of rainfall each year. Not surprisingly, the summit of the mountain is our wettest place with rainfall figures in excess of 12,000 mm per year. Drought conditions are not uncommon, usually occurring in late summer and autumn. Agricultural feed situations can become low throughout the region, particularly in coastal and southern areas.

Highest temperatures are in the summer months with averages ranging from 19 to 24 degrees Celsius but top temperatures seldom reach 30 degrees Celsius. The coldest place in our region is on the summit of Mt Taranaki where the temperature rarely rises above freezing point (0 degrees Celsius).

By New Zealand standards, we are a windy region, generally from northerly, westerly or south-easterly directions. The northerly and westerly winds which come from the Tasman Sea are often moisture laden, a lot of which falls as rain or snow on the mountain, or rain and occasionally snow in other areas.

Tornadoes

Tornadoes are not uncommon. Thankfully they are seldom as severe or as destructive as those in other countries. They can occur in small groups called 'tornado outbreaks' and in Taranaki often form as a result of thunderstorms out at sea. They can move at high speed, usually following a narrow path (often less than 20 metres wide) for up to five kilometres.



In July 2011, Taranaki experienced heavy snowfalls virtually throughout the region.

Taranaki rain radar

The Taranaki rain radar is one of nine in New Zealand, all of which are owned and operated by the New Zealand Meteorological Service, commonly known as the New Zealand MetService. It has been operating at the New Plymouth Airport since July 2008. Information from the rain radar is updated every 7.5 minutes and can be checked on the MetService website www.metservice.com.

Taranaki weather monitoring stations

The Council owns and operates 27 rainfall monitoring stations, six wind measuring stations and 12 air temperature recording stations. The Council also operates three monitoring stations on the mountain. Data from all of these is recorded every minute for rainfall and every 10 minutes for wind and temperature, with the updated figures shown on our website every 30 minutes. You can check the weather monitoring information at www.trc.govt.nz. All sites are maintained by the Council's Hydrology Section.

Meteorological Service

(MetService) weather forecasts

The MetService provides daily, 5-day and 10-day weather forecasts for New Plymouth and Hawera and mountain forecasts. They can be viewed on its website www.metservice.com. It has also developed a smartphone Apps which forecasts weather and is updated regularly throughout the day.

Mt Taranaki and NIWA

(National Institute of Water and Atmospheric Research) weather monitoring station

The Council and NIWA operate a combined rainfall/air temperature monitoring station at the North Egmont Visitor Centre on Mt Taranaki. This monitoring station sends details of weather conditions at the Visitor Centre to the Council website every 30 minutes. Anyone contemplating a visit to the Centre or above it would be wise to check the MetService information at metservice.com. The Council operates other weather monitoring stations on the mountain at the Dawson Falls Visitor Centre and at the Kahui Hut.



These instruments at the weather station at the North Egmont Visitor Centre have various functions. The two on the left are the NIWA and Council automatic rain gauges. The black one is owned by NIWA and manually records rainfall which is checked and emptied every day by DOC staff at the Visitor Centre. The two on the right are Council-owned rainfall storage gauges which are checked and emptied monthly by Council staff. The pole on the right contains a Council-operated air temperature sensor.

Council support

- Invite Kevin to talk to your class about weather in Taranaki or weather-related emergencies in Taranaki.
- Invite Kevin to talk to your class about what to do should a weather-related emergency occur whilst you are at school or at home.
- Visit our website for daily, monthly or yearly weather information.
- Download our 'Weather' study unit from our website or contact Kevin for a hard copy.
- Download information sheets about flooding, storms, high winds and tornadoes from our website www.trc.govt.nz/hazards-in-taranaki





A weather tongue twister

Whether the weather be fine
 Or whether the weather be not
 Whether the weather be cold
 Or whether the weather be hot,
 Whatever the weather
 We'll weather the weather
 Whether we like it or not.

See if you can write yourself a tongue twister along the lines of the weather one above. It is always fun to get some of your classmates to have a go at reciting your tongue twister over and over until they get 'tongue twisted'.

Weather matchup

Match the weather words on the left with the clues on the right.



1. Thermometer	a. 100 degrees celsius
2. Cloud types	b. An instrument for measuring temperature
3. Rainbow	c. The coldest place on Earth
4. Meteorologist	d. The driest desert on Earth
5. Breeze, zephyr and gale	e. A person who studies the weather
6. Atacama	f. A spectrum of light
7. Vostok Station (Antarctica)	g. Stratus, Cirrus and Cumulus
8. Cyclone	h. An instrument for measuring wind speed
9. Anemometer	i. Types of winds
10. Boiling Point	j. A violent wind storm

Hidden weather words

The following sentences have a hidden 'weather' word in them. See if you can spot the word.

- We played an extra innings at cricket today.
- Bill's now got his own bike.
- One twin decided to stay at home.
- Tim is ten today.
- I love rice pudding.
- Show Eric the way to his home.
- Tom will win, Terry will lose.
- Ben was late home and he expected his father to scold him.
- They all smiled broadly in the family photo.
- Emil drew number one out of the box.

Pity the poor TV weatherman in Wales



On Wednesday 9 September this year, the warmest place in Wales was a little village with a not-so-little name. Apparently the sun shone all day at

Llanfairpwllgwyngyllgogerychwyrndobwlllantysiliogogoch.

Good luck if you want to have a go at saying that. Apparently the TV weatherman pronounced it correctly, no trouble at all. By all accounts most people shorten it to Llanfair PG which is very sensible.

Weather anagrams

An anagram is a word that is made by rearranging the letters in the word of another word. For example dame is an anagram of made. See if you can find a weather word that is an anagram for each of the following words.

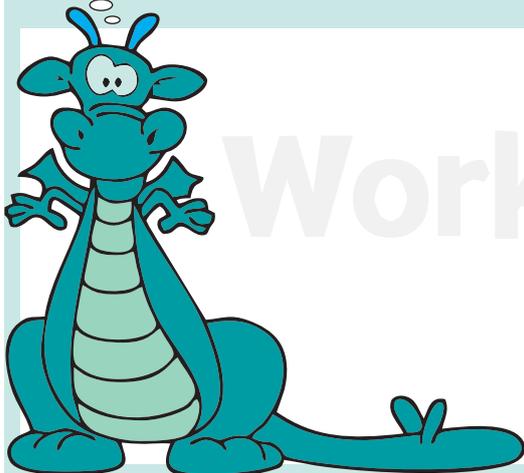
- 1.clam 2.clematis 3.could 4.wed 5.forts 6.tugs 7.hate 8.dice 9.overacts 10.Iran

Jumbled Weather words - speed test

Test your ability to work under pressure with these jumbled 'weather' words. The jumbled words have some sort of link to weather. You could have a class competition to see how many you can unjumble in a set time (eg three minutes).

To make it more fun, you must unjumble them in the order that they have been written. We have put them in an order where we think they get steadily more difficult. You might not agree with us, but that is life. To give you a help, we have printed the first letters in red for the first 12 words. Good luck!

wed nair dwin cei stim laih trosf loofd zebree tslee mosg dgeri
 unerthd ghtrou matecli oudrht ownduopr flsnakeow htilinggn bariso
 hicanerr dityhum meretbaro ttwhiuoe enoclyctina tppreciinoa



Work space

Some appalling weather jokes

What did the tornado say to the sports car?
 Do you feel like going for a spin?

Does it ever rain money?
 Yes, especially when there is change in the air.

What did one hurricane say to the other hurricane? I have got my eye on you.

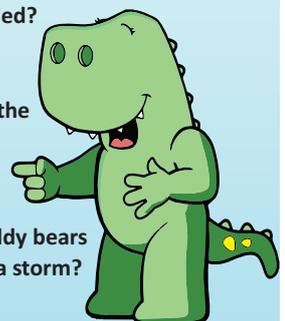
What does a cloud wear under her raincoat?
 Thunderwear

What do you call it when it rains chickens, roosters and ducks? Foul weather

What bow can't be tied?
 A rainbow

What goes up when the rain comes down?
 An umbrella

What happens to teddy bears if they get caught in a storm?
 They get wet.



Council Environment Services Officer Sean Gardiner poses a question to these keen students from Kaimata and Ratapiko Schools during their farm safety day late last term.

The schools organized a fantastic day and invited in 'outside experts' including a veterinarian; personnel from both WorkSafe NZ and OnFarmSafety NZ; two Animal Control Officers from the NPDC and a Council Environment Services Officer. The students were placed in small groups which were rotated around and they learned lots about safety when dealing with dogs, machinery, traps and poisons, bugs and germs and general farming hazards. It was the first day of its type that any of the 'experts' had ever been involved in and all appreciated the chance to contribute. Congratulations to the staff and communities of both schools for facilitating such an informative and valuable day. And the sausages and cake at lunch time were greatly appreciated!!



This and That

Enviroschools

I recently had the opportunity of meeting the new Regional Coordinator for Enviroschools in Taranaki – Lauree Tito. Lauree comes to Enviroschools with community development, youth work and many other skills. She has a passion for sustainability and loves to see young people empowered. You can contact **Lauree by email at:** lauree.tito@enviroschools.org.nz or visit the website www.enviroschools.org.nz.

Tracking tunnel time at Pukekura Park

The Highlands Intermediate environmental group has 'adopted' Pukekura Park as part of its very interesting 'hands-on' programme, under the guidance of Hive Taranaki Impact Programme Coordinator Peter Heard. Three of the students are carefully positioning one of four tracking tunnels, strategically placed in the park. The purpose of the tracking tunnels is to establish the species and numbers of pest animals in the park, hopefully helping in their eradication from that fantastic resource.



Tawhiti Kindergarten practice their earthquake drill.

These little ones show a varying degree of confidence to 'Drop, Cover and Hold' during a recent practice at the kindergarten. Everybody at the kindergarten was extremely welcoming and made my time there very enjoyable. Towards the end of the lesson, the students were invited to ask questions about earthquakes. Many did so, but I was particularly grateful to one young lad who simply asked, "Can Kevin please stay for morning tea?" Not surprisingly, I was only too happy to oblige.

Answers from page 3

Weather match-up: 1.B 2.G 3.F 4.E 5.I 6.D 7.C 8.J 9.H 10.A **Unjumble weather words:** dew rain wind mist hail frost flood breeze sleet smog ridge thunder trough climate drought downpour snowflake lightning isobar hurricane humidity barometer whiteout anticyclone precipitation **Hidden weather words:** 1.rain 2.snow 3.wind 4.mist 5.ice 6.shower 7.winter 8.cold 9.hot 10.mild **Weather anagrams:** 1.calm 2.climates 3.cloud 4.dew 5.frost 6.gust 7.heat 8.ices 9.overcast 10.rain

Highlands Intermediate study home emergency kits

Last term, Suzie Archer's class at Highlands Intermediate studied volcanoes and earthquakes, including how to prepare for them. The students were very surprised to learn that an older style telephone is a very handy resource to have in a home emergency kit because it is not electricity dependent or unlikely to 'crash' from being over-loaded.



For assistance or information on environmental education contact:

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