

Winter is here

With winter now making its presence felt, no doubt many of you are putting your outdoor education programmes on hold until the chance of better weather.

Our congratulations go to Jamie Darbyshire from Hawera High School. As mentioned in the previous issue of SITE, Jamie was selected to attend the Sir Peter Blake Youth Environment forum in April, in Auckland. Jamie must have impressed the right people at the forum because he was duly selected to join thirty secondary school students from around New Zealand on an expedition to the Kermadec Islands. The group will travel on board HMNZS Canterbury to the islands from 8-19 August with a crew of subject experts, scientists, artists, educators, communicators and leaders. Best wishes Jamie for a wonderful experience.

The Council recently presented its annual environmental awards to acknowledge the outstanding work by individuals, professional or community groups, companies, local authorities and educational institutions. Twelve awards were made this year including three to schools and one to a kindergarten. Congratulations to the students, staff and communities of St Josephs (Opunake), Mimi and Moturoa Schools and the Kahikatea Kindergarten for their fantastic work over many years.

A few schools have already registered for New Zealand ShakeOut which was the focus of the last issue of SITE. The recent earthquake in our region was unsettling for many and this Civil Defence exercise will help people throughout New Zealand take appropriate action before, during and following an earthquake. One of its aims is to have one million people participate in the 'drop, cover and hold' drill at 9.26am on 26 September. Other than 9.26am on 26/9 being easy to remember, the time and date were chosen as ones when we could expect most people to be going about their normal day, whether it is at work, at school or at home. Your school will shortly receive a letter encouraging it to take part. We hope that all Taranaki schools participate in the exercise drill at the very least. To register your school in the ShakeOut drill and to get email updates and useful information leading up to the event, go to www.getthru.govt.nz.

Kevin Archer

Council Environmental Awards 2012

Councillor Michael Joyce presented Dylan Karam, a student at St Josephs School (Opunake) with a plaque, as part of the environmental award presentation held recently at the school. Dylan was chosen to receive the plaque as he is one of the founding members of the school's 'Green Guardians' group. Following the presentation, Councillor Joyce was taken on a tour of the school and he was hugely impressed with the wide range of environmental activities the school has been involved in. Similar presentations were made to Moturoa School, Mimi School and the Kahikatea Kindergarten.



Nowell's Lakes



This issue looks closely at Nowell's Lakes, near Hawera and what the area offers teachers and their classes. It looks closely at the relatively short history of the lakes and details work carried out by school and other community groups.

Visit Nowell's Lakes

Name

The area was named Nowell's Lakes after the family who originally owned the farm.

Location

The Nowell's Lakes walkway is about three kilometres south of Hawera and starts at the end of Rifle Range Road (off Whareroa Road). It is close to the Fonterra Whareroa site which owns the land containing the lakes.

Beginning

The gully was retired from farming in 2004 and the walkway track prepared. The first 7,500 trees were planted in June 2005 by children from local schools, the Taranaki Regional Council and other benefactors supplied the seedlings. Signage, seats, toilets and viewing points were supplied by the Hawera Rotary Club.

Official Opening

In 2006, MP Chester Borrows officially opened the walkway and many thousands of trees have been planted since then.

The Area Today

Nowell's Lakes are two beautiful ground-fed freshwater lakes entrapped in the coastal, sand dune belt. The lakes cover seven hectares. There was originally a third lake, but that area is now a gully at the start of the walkway. Much of the 2.5 hectare gully has been planted out by various school and community groups. Visitors can park at the end of Rifle Range Road.



Things to do during a visit

Explore the Walkway

Check out the bird boxes, look for freshwater crayfish in the gully stream, check out the bug wall, smell the herbs in the herb garden, find out about the interesting medicinal benefits of native plants or simply use the beautiful area as a base for written language or other curriculum extension programmes. When visiting the area, you could be accompanied by Council Education Officer Kevin Archer or by the Walkway Co-ordinator Mr Doug Hutchinson (ph: 06 278 6054) who can also provide you with information regarding access for special needs vehicles.

Water Studies

There is a pleasant stream in the gully which is very suitable for a water quality study involving invertebrates, water clarity and temperature. Or you could do a similar study using one of the lakes.

Fishing

The lakes are ground-fed which helps keep the water pristine and clean. They are free of weeds, making them fun and safe places to visit with a small fishing group.

Monarch Butterflies

Each year thousands of swan plants are grown and planted by local school children. The plants are covered with mesh to help the plants get established. If you visit the area between February and April you will see swarms of caterpillars and clouds of Monarch Butterflies.

Wetlands Studies

Invite Education Officer Kevin Archer to show you a PowerPoint presentation about wetlands which would be a good lead-in to a visit to the area.



Conditions Of Entry

You have rights of entry but for everyone's safety, it is important to abide by the landowner's signs.



Wetlands unit and SITE newsletters

Go to the Council website www.trc.govt.nz/study-units to download the Wetlands unit or www.trc.govt.nz/schools-in-the-environment-site-newsletter to download SITE newsletters (22, 24,29,35 and 36) which have useful material.





Jumbled sentence and words

Unjumble these words and place them into a sentence that makes sense. Good luck.

bouta dRoA het dRoA ssttar den

wwayalk l'Nelows hhwic si si 3mk

seLak fo aaHwer ifleR ffo fo dan

rroaWhea. heT anger ouths ta

Some not so useful facts

One can assume that the statements below are true. Can you add your own 'amusing' comments such as the ones in the brackets.

Rubber bands last longer when stored in refrigerators. *(That could be stretching the truth).*

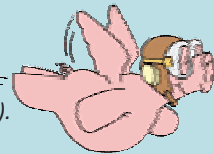


Peanuts are one of the ingredients in dynamite. *(I would understand if popcorn was, but peanuts?).*

"Screeched" is the longest, one syllable word in the English language. *(It probably is the loudest one as well).*

The average person takes seven minutes to fall asleep. *(One presumes this is in a bed and not at school).*

A pig cannot stare up at the sky. *(That might explain why they can't fly).*

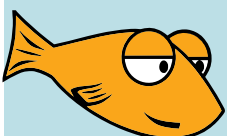


Famous artist Leonardo da Vinci spent 12 years painting Mona Lisa's lips. *(He obviously had plenty of time to 'mouth off' about that).*

Bats are the only mammals that can fly. *(They are the only mammals with wings so they have a big start).*

The tongue is our strongest and most flexible muscle. *(Some people have stronger and more flexible ones than others).*

Some people believe incorrectly that Coco-Cola was originally green in colour. *(Some people turn green when they drink too much of it).*



A goldfish has a memory span of three seconds. *(What type of fish was that?).*

Word search

Hidden below are the names of 3 reptiles, 3 fish, 3 birds 3 plants and 3 invertebrates that can be found in many wetlands areas. See how many you can find, you will need to look across, down, up and diagonally.

Reptiles

Fish

Birds

Plants

Invertebrates

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

Wetlands match-up

Use the clues match the answer - Grey Duck, Kotuku, Kawau, Poaka, Black Swan, Pukeko, Florida, Mt Taranaki, Pantanal (South America),

1.	They originally flew here from Australia but now prefer to run rather than to fly.		
2.	They nest in trees, are quite common on the West Coast and are sometimes called white herons.		
3.	Where in New Zealand are the Ahukawakawa wetlands found?		
4.	Its common name is black shag, it originally came from Australia but is now very much a New Zealand native bird.		
5.	An introduced bird with a very long neck which helps it reach plants on the bottom of ponds.		
6.	Perhaps our most common game bird which is hunted in early winter.		
7.	Sometimes this bird appears to be standing on stilts, its legs are long and pink and it is commonly called the pied stilt.		
8.	The Everglades are a very famous wetland area in US state?		
9.	Name the largest wetland in the world?		

Wetlands quiz

1. What is a wetland?
2. Name two important jobs that wetlands do?
3. Name three types of wetlands?
4. Can a wetland contain salt water?
5. Is a pukeko a wetland bird?
6. Is a desert a good example of a wetland area?
7. Wetlands occur naturally on every continent except one. Which one?
8. Wetlands can receive water from many sources. Is rainwater one of them?
9. One of the wetland's zones is called the submerged zone. Why do you think it is called this?
10. What percentage of New Zealand's original wetlands have been drained? 5% - 25% - 50% - 90%

Junior students from Mangorei School had fun investigating the plant and animal life at Kawaroa in early May. A wide variety of species was found, so an opportunity to show what each group had uncovered was too good to miss.



Woodleigh at Spotswood Primary's Outdoor Education Centre

Two students and a parent helper from Woodleigh School check the identification guide to identify pond living invertebrates during a field trip last month. Although overhead conditions were decidedly chilly, four classes from the school's middle syndicate had fun looking at wetland zones, wetland plants, water turbidity, water temperature and the pond invertebrates. This field trip completed a highly successful wetlands study.



Kaponga School gets out and about

Students from the year 7 and 8 class at Kaponga School recently studied their local stream as it passes through Kaponga. A wide variety of invertebrates were found and the three students pictured were determined to correctly identify the ones they found. At a later date the same class went to New Plymouth to study, among other things, plant and animal life at Kawaroa. Great excitement surrounded the catching of this octopus.



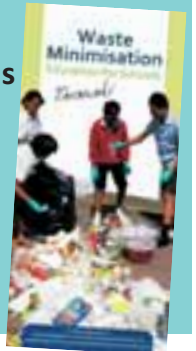
Bits 'n' Pieces

Museum Programmes

It is not too late to enrol your class(es) in some of the innovative and interactive programmes available at either Puke Ariki (New Plymouth), ph (06) 759 6710 or at Aotea Utanganui(Patea), ph (06) 273 8354. For news, programmes, updates, photos and resources visit the Puke Ariki Education blog
www.pukearikieducation.blogspot.com

Waste Minimisation Education for Schools

Please find time to look over the enclosed brochure detailing what programmes are available to you to minimise waste in your school.



Be part of New Zealand's largest earthquake drill.

9.26am, 26 September 2012

DROP · COVER · HOLD

Visit www.getthru.govt.nz to register for ShakeOut and find out more information

Answers from page 3

Wetlands quiz: 1-An area containing water either above or below the land. 2-prevent flooding, help birds migrate, reduce erosion and nutrient run-off, habitats for birds, fish and reptiles, store and purify water, support a wide range of native plants 3-estuaries,lakes, ponds, lagoons, marshes, bogs, swamps 4-Yes 5-Yes 6-No 7-Antartica 8-Yes 9-It is always under water 10-90%

Unjumbled words and sentence: The Nowell's Lakes walkway is about 3km south of Hawera and starts at the end of Rifle Range Rd which is off Whareroa Rd.

Wetlands inhabitants word search: Reptiles - frog, lizard, gecko; Fish - eel, flounder, kahawai; Birds - pukeko, tui, duck; Plants - flax, sedge, kawakawa; Invertebrates - dragonfly, diving beetle, damselfly;

Wetlands match-up: 1-Pukeko 2-Kotuku 3-Mt Taranaki 4-Kawau 5-Black Swan 6-Grey Duck 7-Poaka 8-Florida 9-Pantanal (South America).

For assistance or information on environmental education contact:

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www.trc.govt.nz

PLANTING AT

Waikirikiri Lagoon



In recent years, several groups from the Coastal Taranaki Area School have planted grasses in the sand dunes around the Waikirikiri Lagoon, near Okato. Winter conditions in the area can be unpleasant, but the students always get stuck in and the results of their efforts are already emerging. Thank you Coastal Taranaki Area School.