

March Update, 2014

Vol. 7, Issue 1

Out with the Old by Dorothy Maddock

In early September of 2013 a large, old pine tree (weighing about 25 tonnes) crashed across the valley of Te Auaunga, doing quite a lot of damage on its way down. It had stood for perhaps a hundred years, high up on the left bank, just upstream of Plane Tree Bridge, but a fierce wind had been too much to bear.

Council appointed workmen came along and removed any damaged or fallen branches for the safety of the general public, while the powers that be pondered on the fate of the large trunk. Removal without further damage to the existing trees was going to be a job for experts.



The crane hovered like a giant preying mantis ...



During the preceding days some experts assembled the necessary equipment, which included the biggest crane I've ever seen. It hovered over the whole scene like some giant praying mantis. And on January 29th, in a period of calm weather, they were ready to go to work ... early in the morning.

I was directed to the western side of the downs, near the stump and the remaining pine trees, where workmen were already busy with securing ropes and chainsaws at the ready.



It all happened rather quickly, really. The tree trunk was cut into segments, but each one was held at one end by the crane, then hoisted aloft and removed to the Unitec side before the next one was cut. The man using the chainsaw was also supported by the crane when he had to work on each new cut. I was impressed by the speed and precision of the whole operation.



Planting season 2014

Planning for this year's planting is well under way, with about a dozen different projects - that's a lot of co-ordinating for Friends of Oakley Creek, but wonderful too, that so much good work is to be done. The projects range from further restoration of the mahoe rock forest, to infill planting by St Jude's Scouts, to the start of planting at Waterview Glades, funded by the Well Connencted Alliance as part of the SH20 extension mitigation, as well as the regular monthly community planting.



Dates for your diary

Bring your family and friends - and spread the word about:

Sunday 30th March 1.00-4.00 pm: EcoWest Festival – Oakley Creek Guided Walk See <u>http://www.ecomatters.org.nz/what-s-on/ecowest-festival-2014</u>/

Sunday 6th April, 10.00 am - noon: Community Working Bee

Sunday 4th May, 10.00 am - noon: Community Planting (or Working Bee if still dry)

Monitoring and pest control dates will be advised by email – please get in touch if you would like to help and do not usually receive these email notices.

See <u>www.oakleycreek.org.nz</u> or contact Wendy John, by emailing <u>info@oakleycreek.org.nz</u> or phone 815 3101 or 027 232 6454 for more information.

Water monitoring for NIWA

Dr Richard Storey, freshwater ecologist at the National Institute of Water and Atmospheric Research (NIWA), has invited Friends of Oakley Creek to participate in a nation-wide research project. The aim of the study is to assess the accuracy of water monitoring carried out by community volunteers. The use of such data could provide much greater detail about New Zealand's waterways. NIWA will supply the kits for checking water quality indicators (including bacteria, nutrients, oxygen, invertebrates, temperature and clarity) at sites along the creek where testing is undertaken regularly by Auckland Council. The accuracy of our data, along with that collected by other community stream restoration groups around the country, will then be assessed.

This is an exciting opportunity to extend the monitoring which we do under Auckland Council's Wai Care programme, hopefully validating the data to make it more useful for scientific research as well as for education.

Chinese knotweed discovered on Oakley Creek



A very nasty weed, chinese knotweed *Persicaria* chinensis (left), was recently discovered on Oakley Creek - albeit, only in one location. It was identified by one of the Te Ngahere team, just upstream from the Phyllis Reserve Bridge, on the true right (east) bank. Te Ngahere reported it to the biosecurity team at Auckland Council. It has now been sprayed twice, and will be checked to ensure it does not regrow. The Council has also organised a survey of the area, to ensure it has not established in any other areas along the creek, or in the immediate, surrounding properties.

Photo: W. John If you see this highly invasive plant, please report it to Auckland Council biosecurity.department as soon as possible – ph 301 0101 and see http://www.biosecurity.govt.nz/pests/chinese-knotweed

Kids restore NZ

A programme of the Air New Zealand Environmental Charitable Trust, Kids Restore NZ provides financial assistance to environmental projects which are led by young people. For example, Westmere Primary School received help to start restoring Francis St Reserve, which is near the school. For more information see <u>http://www.kidsrestorenz.org.nz</u> Would anyone like to start a new



project at Oakley Creek?

Asplemium oblongifolium perched on a ponga. Photo: W. John

SH20 tunnel photos ...

Impressive photos of Alice, the tunnel-boring machine, and 'her' work can be seen at <u>http://albums.jeffsmithphotography.co.nz/life</u> <u>-underground</u>

What is this and why is it exciting?



Check to see whether you are correct at the end of the newsletter.

Photo: W. John



Spring tide and storm surge at the litter trap. Photo: W. John

Whack back worst weeds please, before they seed ...

Here is your annual reminder to deal with any moth plant and woolly nightshade you may come across, wherever you are, before they release their many thousands of seeds. However, do be careful not to get any moth plant sap on your skin or clothes, and beware of woolly nightshade irritant hairs. Please ask your friends and family to help too - many thanks!





Monitoring and pest control by Jane Shand

We now have two sets of results (August 2013 and February 2014, right) for our wax tag monitoring in the pest controlled areas on the west and east sides of Oakley Creek. A total of 40 tags were set out at 25 metre intervals on both sides of the creek, then collected a week later and the bite marks analysed for pest type. Some tags from the east side were unable to be included in the analysis. The trapping programme differs slightly for each side of the creek - there are 13 Timms and DOC traps on the east side and 8 of each on the west side, with more regular rebaiting on the east side. Rodents are also targeted with rodent bait stations located on both sides of the creek.

Oakley Creek Wax Tag Monitoring	Date	No. of tags	% tags with bites by			
			Possum	Rodent	Rabbit	
West Side	Aug 2013	40	2.5	27.5	2.5	
	Feb 2014	40	10	65	13	
East Side	Aug 2013	36	0	5	2.78	
	Feb 2014	39	10.3	23	5	





Possum (top) and rat (above) bite marks on wax monitoring tags. Photos: A. Stanton

February 2014 shows an increase in bites for all the pests, but rodent bites have increased markedly (two and a half times more rodent bites on the west side and four and a half times more on the east side from August 2013 to February 2014). In February 2014, 65% of tags on the west side had rodent bites compared to 23% with rodent bites on the east side.

We had an equal number of possum bites on both the east and west sides in February, showing an increase in both areas. Rabbits also appear to be biting the tags in greater numbers in February 2014, but there is a greater increase on the west side.

From our trapping results data, the total catch of possums from 1 July 2013 to March 2014 on the east side was 23 and on the west side only 1. Rodent catch for the period was 23 on the east side and 8 on the west side.

As we continue our monitoring using the same method, we should be able to see trends, for example, seasonal effects. This will help us adjust our pest control programme to be as effective as possible.

Many thanks to the monitoring volunteers for setting out and collecting the tags. And also to the trapping teams - Mt Albert St Jude's Venturer Scouts, John Maskell and Per Nielson - great work. We ARE making a difference!

Regular volunteer, John Stevenson, helping with possum monitoring. Photo: W. John



Thank you Collectively Kids!



We received a wonderful gift at the end of last year - Collectively Kids Early Childhood Centre gave a donation to our 'Gift a tree' programme, together with a lovely card and fantastic illustrated collaborative story, which we are delighted to be able to share with you here:

Dear Wendy,

The children have been doing a lot collaborative storytelling. We decided we would tell an Oakley Creek story that would be our present for you as well as four trees for Oakley Creek. This story was told over several days and was edited by the children - the main idea with editing seems to be to add more.

We are not sure if you know that so many creatures flourish in the area, it really is a diverse place!

Thank you again for giving us an opportunity to be involved in the Oakley Creek project and for sharing your knowledge and time with us. It is a place we

really love and treasure - great for running, storytelling, learning about nature and we can help to make a great place even better by planting and collecting rubbish.

We hope you have a lovely Christmas and New Year and look forward to seeing you again in 2014!





Mō Tātou te Taiao ko te Atawhai Mō Tātou te Taiao ko te Oranga

It is for us to care about the environment to ensure its well-being In doing so we ensure our own wellbeing and that of future generations



Once upon a time there was a waterfall and there was a troll. Also there was an alien called Ira alien and Logan too. There was an ape, and a walking spoon that did bend cause it bumped into a rock. The troll had a hat on and a leaf did blow on the hat.

Then the walking alien had a hat on too and a leaf did blow on his head too. The garden was full of rubbish, but the monster did put it back in the bin. An octopus at Oakley Creek did scratch my face and stick to it. Then a racing car came and did fall in the water. Other people saw it and they called Hulk and Superman to lift it out.

Then a mermaid came and did put her head out of the water. The other mermaid came and put her head in the water. They swim to the deep end. They don't mess up anything. The princess was standing blocking the way on the bridge. There was two princesses one named Peoni and one named Charlotte. They tripped on the bridge and fell into the water. They ruined their dresses. The Barbies came to rescue them and dry their clothes. Then the rain ruined their clothes again. A Barbie came and she put different dresses on because their other dress got ruined. Then they did plant trees. And then I like to eat after that. Then the food slipped off the plate and slipped into the water and the ducks got it. A pig came and broke the duck. The duck broke the pig.

There was a big storm and a bear came and a ghost and Logan dinosaur and a dinosaur named Flowerpot that was a girl. They live at Oakley Creek. The dinosaur will be careful not to break the dolphin's area and the mermaids area. Goodbye Oakley Creek, we will see you next time and we all waved goodbye.









A fantail's nest (left), a puriri grub in residence in an Oakley Creek manuka tree trunk (centre) and a young white faced heron (right) on Wairaka Stream in Unitec. Photos: W. John

Compensating for ecological harm by Adrienne Stanton

Ecological compensation, in the form of positive conservation actions, is a common method used to mitigate impacts from development and resource use. For example, at Oakley Creek, restoration planting through Alan Wood Reserve has been required by the Environment Court as part of the consent for the SH20 extension.¹ Marie Brown et al (2014)² have researched the effectiveness of such ecological compensation in New Zealand by studying 110 cases.

The conclusion reached from this research is that ' ... the consideration and implementation of ecological compensation in New Zealand is noticeably ad hoc ... and unlikely to achieve environmental protection goals'.

Perhaps of most concern is the finding that there is no agreed methodology or consistency around determining the level of ecological compensation required for any particular project. Levels have been set under the influence of '... resourcing by and willingness of the applicant ...' or by 'negotiation' rather than by an objective assessment of the effects of the project. However, councils do set minimum standards.

One of the issues examined was that of additionality, whereby ecological compensation comprises actions which are truly new and would not have otherwise occurred. In our Oakley Creek example, additionality would not be achieved for this part of the compensation as Auckland Council and its agencies have existing plans for undertaking restoration activity (to varying extent) along the length of the creek. More generally, Brown et al note that unlike other countries, New Zealand has few statutory requirements or minimum standards for the ecological management of private land (for example, for pest control), so additionality there is usually easily met.

Another concern raised by this research was that most compensation requirements have duration of less than five years, with associated cessation of monitoring and oversight as well. For our Alan Wood Reserve example, Friends of Oakley Creek was able to ensure that the SH 20 restoration plantings should be maintained for ten years, rather than the two years initially proposed. This maintenance work is to be monitored by Auckland Council. However, it should be noted that the level of maintenance was not defined. Brown et al note that compensation should '... persist for as long as the impact and permanent losses should not be offset by temporary gains'.

It was also noted by Brown et al that a cause of great concern was the ambiguity of many requirements, leading to difficulties in monitoring compliance and taking action against defaulters. They conclude that there needs to be an increased emphasis on this area.



¹It should be noted that this article is not intended as a review of the SH 20 extension project ecological compensation, rather, aspects of it have been used to explore some of the issues surrounding ecological compensation.

²Brown, M.A., Clarkson, B.D., Stephens, T. and Barton, B.J. 2014. Compensating for ecological harm – the state of play in New Zealand. NZ Journal of Ecology, 38(1): 139-146.

Take a look at ...

<u>http://www.asknature.org</u> This website catalogues solutions to human problems from nature, through the use of biomimicry. There are descriptions of various organism adaptations which may be useful and of biomimicry case studies - such as the design of window glass which mimics the UV reflective qualities of spiders' webs, preventing bird collisions.

Rare view of Oakley Creek Te Auaunga, from the north-east end of Howlett Reserve, Waterview, looking upstream in the tidal reach, with the temporary bridge for motorway construction works.







Pied stilts [and a little shag] seen feeding at the Oakley Creek diversions and Valonia wetlands in the past week are evidence that if you provide the right habitat, the birds will come. The dainty pied stilt is classified as 'nationally at risk', meaning its numbers are declining. The[se] sightings ... are therefore a real ecological success.'

Reprinted with permission from Well Connected Alliance Construction Update.

Photos: Well Connected Alliance.

Photo: W. John

Eco-word find

R	0	S	Е	С	0	Ν	т	R	0	L	т	S
Е	С	0	S	Y	Μ	0	С	Е	С	Ν	S	Y
С	Е	С	0	S	Ρ	н	Е	R	Е	0	Т	R
Е	С	0	S	Y	S	т	Е	Μ	0	С	G	А
С	0	R	С	Е	С	0	Ν	0	Μ	Y	0	U
0	S	Е	0	Μ	С	0	Т	Ν	G	S	L	т
S	0	V	С	Е	R	0	т	Т	Ν	Е	0	С
Ρ	U	С	Е	Т	Е	Е	L	т	0	L	С	Ν
Y	R	Е	V	0	С	Е	R	0	н	С	Е	А
R	С	Ν	С	Μ	0	т	т	R	G	Ρ	Е	S
А	Е	R	0	т	S	Е	R	T	Ν	Y	С	0
U	0	S	Е	Е	А	С	U	N	А	R	Y	С
С	S	Е	Ρ	0	С	Е	N	G	N	I	Н	Е

Ducks in the city ...

Duck art has appeared around Rocket Park lately, including on this photo mural of the Oakley Creek waterfall (right).

And, after the high winds of Cyclone Lusi, more than 90 ducks could be seen in the calm stretches of water upstream from the Troll Bridge. (Troll Bridge is the next bridge downstream from the Unitec Bridge.)

Can you find these eco-words? Ecology Recovery Eco-sanctuary Ecosphere Pest control Economy

Restore Environment Ecologist Eco-source

Monitoring Ecosystem





Eco - precision or pedantry?

" ... Ecology is the study of biological communities. How populations interact. It does not mean recycling aluminium cans. It's an experimental and theoretical science, like physics. ... If I hear one more milksop discussing the environment and calling it 'the ecology', honestly, Dellarobia. I might break a Mettler balance on his head..." he said.

Excerpted from *Flight Behaviour* by Barbara Kingsolver, 2012.

Ecology *n*. 1. the study of the relationships between living organisms and their environment.

2. the set of relationships of a particular organism with its environment. [C19: < G Ökologie, < Gk oikos house (hence environment)]

The Collins Concise Dictionary: New Edition 1998

Ecology *noun* 1. a. the branch of biology that deals with the relations between living organisms and their environment

b. the complex of relations between a specific organism and its environment

2. (sociology) the study of the relationship and adjustment of human groups to their geographical and social environments

Collins English Dictionary. Retrieved March 25, 2014 from

http://www.collinsdictionary.com/dictionary







After Cyclone Lusi, as well as more ducks, there was also noticeably less rubbish along the walkway than after other similar storms. This great result was thanks to the thirty volunteers who worked hard at our annual clean-up at the beginning of March. Approximately 30 bags of rubbish and 18 tyres plus assorted other large items, including a plastic chair, were retrieved from the streambed and along the banks.





More photos from the clean-up can be seen below in Out and about ...

Weed watch

This section of the newsletter features details about weeds that threaten the native plants along Oakley Creek. You can help by tackling them at the stream and in your garden, if present. In this issue:

Crocosmia × crocosmiflora, Iridaceae - montbretia



Photos: A. Stanton

- fast growing, perennial herb in the iris family
- forms dense clumps, preventing native seedling establishment and outcompetes low growing shrubs and herbs
- stiff long-bladed leaves have strong mid-rib and parallel veins
- leaves may die back in winter
- orange trumpet-shaped 6-petalled flowers, borne in a zig-zag pattern on a single plane
- few reddish brown seed produced in 3-sided capsules
- rounded underground corms form in chains, youngest at the top
- oldest corms have contractile roots which pull them deeper into the soil
- spreads rapidly by vegetative growth of corms and rhizome fragments
- originally from South Africa
- introduced as a garden ornamental in the 1930s
- first bred by French plant breeder Victor Lemoine in 1880. as a hybrid of *C. aurea* and *C. pottsii*







Lemoine was the first foreigner to receive the Royal Horticultural Society's Victorian Medal of Horticulture and was well known for his lilac breeding.





Control: Dig out small patches, ensuring that all corms are found. The chains of corms readily come apart, as do the leaves from the corms, when pulled from above. The corms should be sent to landfill, buried deeply or burnt. Large areas require the application of herbicide or may be overplanted with young trees, as in the long term, montbretia may not persist in the deep shade of a forest canopy.

See <u>http://www.nzwomansweekly.co.nz/health-home/gardening/wonder-weeds/</u> for another view of weeds, including montbretia.

Did you know?

Did you know that weta are dispersal agents for some small native seeds? If you would rather do it yourself, there is a useful guide to collecting and growing native seed on the Department of Conservation website <u>http://www.doc.govt.nz/getting-involved/volunteer-join-or-start-aproject/grow-native-plants/</u> Monster hedgehog on the loose? From the tracking tunnel monitoring ...



Photo: W. John

Out and about ...

Photos: W. John (unless otherwise stated)



These damselfly nymphs were seen near Cradock Street Bridge during water monitoring there by Jeffrey Lang and, volunteer Eileen Witt and Kath Read, Wai Care, undertack their

reg sar the Sc mo sit

Wai Care, undertook their regular sampling at the St Jude's Scouts water monitoring site.



Oakley Creek Te Auaunga waterfall, after heavy rain in January.





Waikowhai Scouts helped out at the Annual clean-up.



Hooray - a 'new' hairbrush! It was pulled out of the stream bank, with bonus mud and algae ...



Nikau Rhopalostylis sapida *flowers opening*.





Before ...

... and after.

Arthur, Xinxin, John and Mark (above right) undertook this summer weeding, taking out more than 50 bags of bindweed. Thanks team for a great effort!







Conservation Volunteers and **Auckland Tourism Events and Economic Development Group** spent a day weeding at the creek in February.



Flax Phormium tenax flowers.



Volunteers from Shah Satnam Ji Green S Welfare Force also worked hard releasing native plants from the engulfing weeds.



One of Leslie Haine's **Open Polytechnic** classes helped identify footprints during rodent monitoring, while another class started the year by checking out a 'sense of place' on the creek, Jim Antill's class had a weed identification session.





Moth Plant 'weedbusters' - from left, Keith Ayton, Wendy John and David Smith - put in a hard morning's work of eradication before fruit set.

David Smith's **Unitec** language students photographed themselves enjoying Oakley Creek. *Photo: D. Smith*



An adventure was had on the fallen pine (left), before it was removed ...

A Rocha and Haven (right) held a Working Bee at Cradock Street Bridge.





Some outside assistance, with a paintbrush, was given to some specimens of our New Zealand gloxinia, Rhabdothamnus solandri, to pollinate the long and narrow tubular flowers (right). Unfortunately, the usual pollinators, bellbirds and stitchbirds, do not, as yet, frequent Oakley Creek.





Gahnia setifolia in flower.

Solution: What is this and why is it exciting?



This is a kahikatea seed and it is from the first crop of kahikatea seed cones to be produced from restoration planting at Oakley Creek. It is from a female tree planted in the Wairaka wetland area by the Buchanan Rehabilitation team in 2006.

Kahikatea, Dacrycarpus dacrydiodes, is New Zealand's tallest native tree. It can grow to over 60m and live for more than 600 years, so this seed has great potential! The actual seed is the shiny black part and it is topped by the fleshy orange to red receptacle, which is attractive to birds, and to humans - Maori ate the fruit (koroi) and placed bird snares in the fruiting trees.





ASB Community Trust Te Kaitiaki Putea o Tamaki o Tai Tokerau supported by 'ASB





We gratefully acknowledge the support of ASB Community Trust, The Trusts Community Foundation and Auckland Council: Albert-Eden and Puketapapa Local Boards; Community Organisation Grants Scheme (COGS).

Next Newsletter Contributions and comments for the next newsletter are welcome - please send to info@oakleycreek.org.nz

New Members Welcome, Donations Too!

We would welcome more members (\$10.00) and/or donations towards the work we are doing to protect and restore our wonderful urban 'taonga' - Oakley Creek Te Auaunga. Donations over \$5.00 are tax deductible.

Contributions and gift plant orders can be made directly into our bank account:

Friends of Oakley Creek - Kiwibank - A/c 38-9003-0978224-00

or cheques, made out to 'Friends of Oakley Creek', can be sent to: 4/65 Woodward Road, Mt Albert, Auckland 1025.



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