Friends of Oakley Creek
Te Auaunga

March Update, 2012 Vol. 5, Issue 1

Saving skinks – it's time to move to a new neighbourhood

As part of the SH20 Waterview Connection project, the Well Connected Alliance has contracted environmental and engineering consultants, Tonkin and Taylor (T&T), to implement a Lizard Management Plan. Under this plan, native copper skinks (Cyclodina aenea) have been collected for removal from Alan Wood Reserve, an area that is to be greatly modified (see following article by Dorothy Maddock).

The Waterview Connection Lizard Relocation project was blessed by iwi representative, Pita Turei. An initial site meeting to investigate potential release sites was attended by representatives from Auckland Council, Te Ngahere, Well Connected Alliance (WCA – construction consortium) and Friends of Oakley Creek. ***Photo: W. John***

Copper skinks are small and cryptic, so it is difficult to locate and capture an entire population. Temporary artificial lizard homes (similar to those used in our monitoring project) were established, initially, to monitor the population, and then to allow any copper skink residents to be caught for the translocation. However, the most effective capture method uses an unlikely tool - a lawn mower. The collection area grass was cut with the mower set at its highest setting, with the catching crew following closely behind to pick up the now visible, scattering skinks.

Lizard lexicon – learn the lingo

LMP	Lizard Management Plan
ACO	Artificial Cover Object = artificial lizard home
CWD	Coarse Woody Debris = fallen logs and branches
SSF	Super silt fence = fencing which can also be used as a lizard proof fence (not needed at Alan Wood Reserve)

Temporary containment boxes = lizard cage
Salvaged lizards = lizards caught for translocation

Photo: W. John

Photo: W. John

Photo: M. Baber

Photo: W. John

Left - Kieran Miller (T & T) collected logs for piling together in the release site to increase the amount of shelter available to the skinks; centre - A handful of copper skinks. About a quarter of those being translocated were found to be gravid, that is, pregnant; right - Katherine de Silva and Kieran Miller (T & T) and Toby Ross (Friends of Oakley Creek volunteer) measuring copper skinks prior to their release.

Lizards like: flax (*Phormium tenax*), toetoe (*Austroderia fulvida*), pohuehue (*Muehlenbeckia complexa*), carex grasses (*Carex* spp.), rice grass (*Microlaena stipoides*), taupata (*Coprosma repens*), mingimingi (*Coprosma propinqua*), and karamu (*Coprosma robusta*). (*Lizard Management Plan*, Well Connected Alliance, 2011).

The captured skinks (130 to date) have been released into the safety of the Oakley Creek Walkway Reserve (in the open space on the true right, east bank, below the Unitec organic garden). Monitoring by the consulting herpetologist, Matt Babar (T&T), had found that this area had a lower existing population of copper skinks than expected. This site's rank grass and other low growing vegetation provide an excellent lizard habitat, which has also been enhanced with piles of logs to provide refuges for the skinks. Weed and mammalian pest control are also required for the translocation to be successful and this work will complement that already being undertaken by Friends of Oakley Creek and Auckland Council.

Dates for your diary

Bring your family and friends - and spread the word.

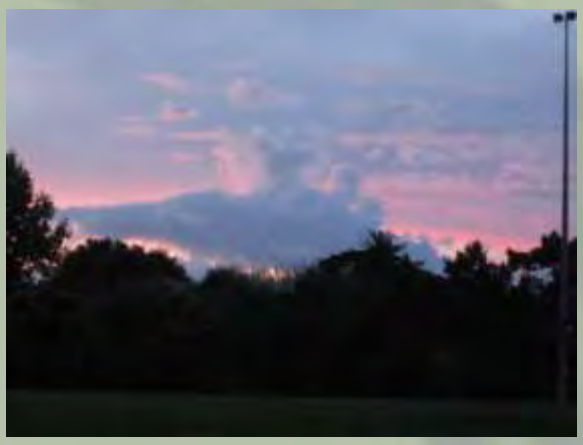
Sunday 1st April, 10.00am – noon: Community Working Bee

What to bring: Sturdy footwear and a sunhat, plus, if you have them, a spade or hedge clippers and garden gloves.

Saturday 24th & Sunday 25th March, 9.00am: Rodent monitoring

Sunday 6th May, 10.00am – noon: Community Tree Planting

See www.oakleycreek.org.nz or contact Wendy John by emailing info@oakleycreek.org.nz or ph 815 3101 for more information about these activities.



Storm cloud over Oakley Creek Te Auaunga. *Photo: W. John*

"It's opener, out there, in the wide, open air."

- Dr Seuss.

(March is Dr Seuss Month.)

Copper or rainbow?

If you see a skink along Oakley Creek, here are some tips to work out which species it is – the native copper or the Australian rainbow (a pest species):

Head scale – the rainbow skink has a single diamond shaped scale in the middle of its forehead
– the copper skink has two scales, divided along the centreline

Colour – the rainbow skink is an even brown all over
- the copper skink is patterned and has a distinct colour difference, being paler along its sides and underbelly

Shape – copper skinks have a stouter body shape and shorter toes
- rainbow skinks are more slender
- copper skink tails are about the same length as their body
- rainbow skink tails are about 1.5 times their body length

Movement - the rainbow skink's body snakes from side to side as it runs

Behaviour – rainbow skinks are more likely to be seen on top of things
- copper skinks are likely to be found under cover
- while both skink species will run away when disturbed, rainbow skinks may reappear after a short time.

Calling volunteers!

With the new year underway, there are lots of opportunities to be involved and spaces in our monitoring and pest control teams. It's lots of fun, interesting and rewarding. If you can help out, please contact Wendy ph 815 3101 or email info@oakleycreek.org.nz

Five Finger vs Seven Finger – can you tell the difference?

See the end of the newsletter for the answer.

Photos: W. John

Time to tie a knot in your handkerchief ...

... to help you remember to weed out any moth plant and woolly nightshade that you come across, before they set seed. If you have time for just one thing, please cut off and remove all moth plant seed pods now – this needs to happen city-wide.

Photo: A. Stanton

SH 20 Update

Well Connected Alliance meetings: As you may know things are moving apace with the new motorway. As part of the required consent conditions, Friends of Oakley Creek is being consulted on a number of issues, including the realignment of Oakley Creek (in Hendon/Alan Wood Reserves), the translocation of the copper skinks and the relocation of the rare *Geranuium retrorsum* Oakley Creek. We are also attending meetings of the Community Liaison Groups (CLGs – Waterview & Owairaka) to ensure we are kept up-to-date, and have input into the various aspects of the project as it progresses.

Waterfall area upgrade

Local iwi kaumatua, Eru Thompson, spoke about the history around the stream.

Photos: C. Casey

A formal ceremony was held on December 11th to celebrate the upgrade of the waterfall area. The project, which was initiated by Friends of Oakley Creek and funded by the ex-community / local boards, included a new viewing platform, low mobility path and landscape planting. The stream, birds and insects filled in the soundscape as Kaumatua, Eru Thompson, blessed the work. Wendy John and members of the Council and Local Board gave speeches explaining the background to the project and thanking all those involved. Morning tea was then shared together in the warm sunshine.

Top: Councillors and community gathered together at the waterfall.

Bottom: From left, Auckland councillors, Sandra Coney and Cathy Casey; Albert Eden Local Board Chairperson, Peter Hayes; and Friends of Oakley Creek Chairperson, Wendy John.

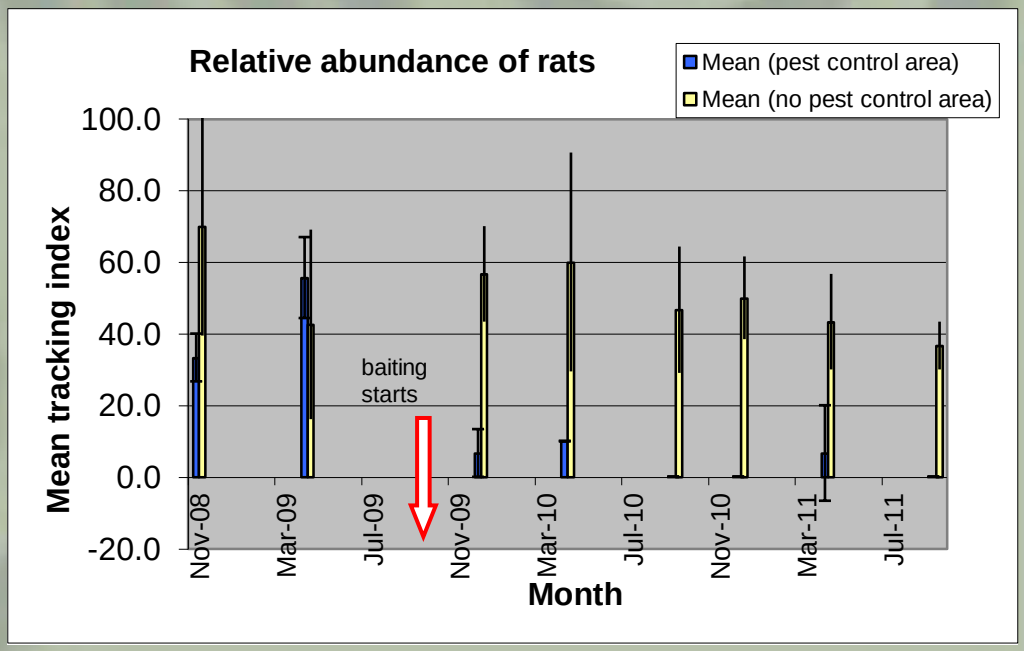
Did you think we were all finished?

We were pleased to receive the publicity for Oakley Creek that the waterfall area upgrade engendered. However, the headline in *Auckland City Harbour News*, '**Oakley Creek makeover complete**', was sadly misleading. There is, of course, much more still to be done to restore and enhance the stream and surrounding areas!

Monitoring and Pest Control Update by Alicia Warren

Rodent monitoring results

There have been eight monitoring periods to date, with the first two periods occurring prior to the onset of rodent control. This control has taken the form of baiting with diphacinone (Ditrac), which started in July 2009 and was conducted monthly at first and then every two months. In August 2011, bromadiolone (Contrac) was used to counter persistently high mouse numbers, which occurred as a probable consequence of the reduction in the rat population.



Above: This tracking card is baited with peanut butter on a leaf and now it is ready to go into the tracking tunnel; and right: Eufracio Rivers, his son, Dane, and Margaret McConnell, rodent monitoring;.

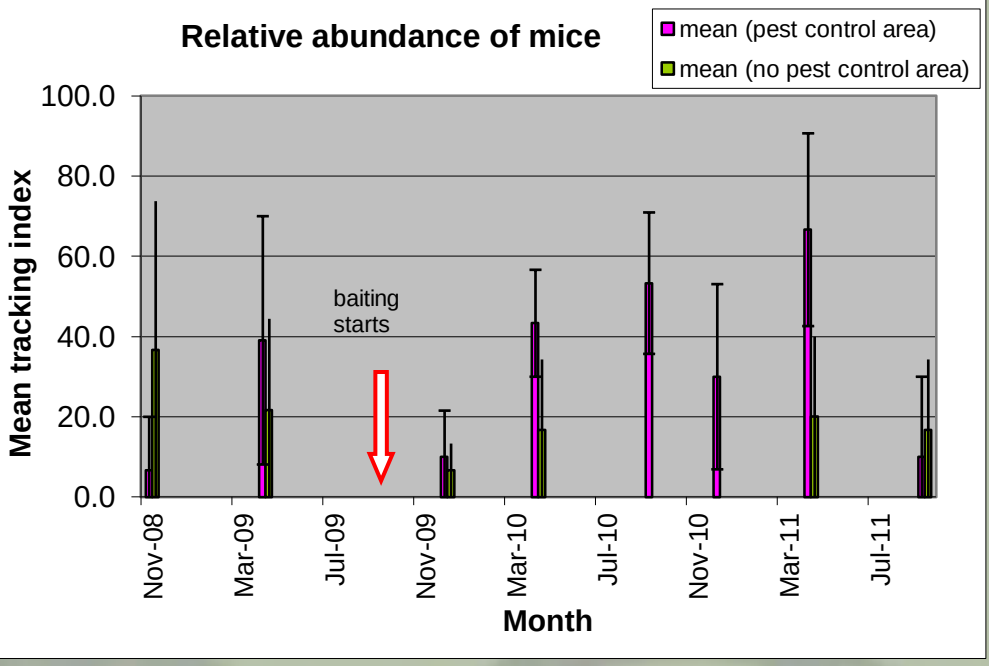
Photos: W. John

Rats:

The baiting regime effectively reduced rats in the pest control area (blue bars) when compared with the no pest control area (yellow bars). Mean rat tracking indices have been between 0-10% in the pest control area, and between 37-70% in the no pest control area since November 2009. As predicted, rats have been lowest in spring and highest in autumn in the pest control area.

Mice:

The baiting regime has not effectively reduced mice in the pest control area (pink bars) when compared with the no pest control area (green bars). The mean tracking indices in the pest control area have varied between 10% and 67% since toxin baiting started, and between 7% and 20% in the no pest control area. The times when mice have been at their lowest numbers in the pest control area have been (1) 7% in the spring before baiting started, when rats were common, (2) 10% in the early summer after diphacinone was provided in winter for the first time, and (3) 10% in the spring, one month after the toxin was switched to a pulse of bromadiolone.



This mouse nest was found in a rodent bait station containing diphacinone!
Photo: W. John

Interaction between rats and mice, and resistance to toxins:

Mice numbers are known to be suppressed by rats. Mice are known to be more likely to develop resistance to toxins (especially first generation anticoagulants) than rats. These two things appear to have acted here. The absence of rats in the pest control area appears to have been beneficial to mice. The presence of the first generation anticoagulant, diphacinone, only affected the mouse population initially, and then the mouse population developed resistance to the toxin. The presence of the toxin effectively selected for mice that could tolerate it and breed. These mice produced new generations of mice that could tolerate the toxin.

Strategy for 2011-2013:

- Limit our toxin applications to 3 pulses a year; each pulse to be no longer than one month.
- Timing of pulses – baiting should occur 1 month prior to the month of monitoring.
- Continue to use diphacinone for 2 of those pulses, and a second generation anticoagulant for the third pulse. The best time of year for use of a second generation anticoagulant is late winter/spring (August).

Thank you to all of the volunteers who help with this work.

Like it or not, a motorway is coming by Dorothy Maddock

Change is afoot along that part of Oakley Creek Te Auaunga that runs through Alan Wood Reserve. Some people would call it, at best, disruption, while others have much stronger phrases to express their dislike of the destruction they know is coming to their dogs' and their exercise regimes. It is all because of the coming of the State Highway 20 extension.

The creek needs to be diverted at the point where Alan Wood Reserve is at its narrowest because there, the new motorway is to be somewhere near 50 metres below ground level – almost at the level of the portal of the tunnel. The diversion will cut through an isolated section of the reserve that can only be entered from Methuen Road, making it rather underused, but "our" greenspace never-the-less.

The clearing starts.

This section, triangular shaped and sloping down to the level of the bank of the creek, was bordered by a scrubby mixture of privet and whatever else could get a foothold in the clay soil, along with a few odd tree ferns and an apple tree. It was home to a number of pukeko and a guinea fowl, as well as the usual sparrows, minahs and blackbirds, etc. It had also been rather a dumping ground for rubbish, not really noticed until uncovered by the diggers, and there was a good selection of weeds, which probably seemed ugly to the eyes of authority, but which had been an undisturbed haven for a considerable number of years.

On January 10th, the work began on the south eastern side of the triangle and within a few days it looked like this (see photo, right - taken from further along Methuen Road). The piles of wood and dead and dying branches were left where they were. (In the foreground of this picture can be seen the basalt rock wall which has confined the creek since the early 1940s.)

Guinea fowl wanders in the semi-cleared landscape.

I wondered how the debris would be removed as it would need to be carted out along the only access in Methuen Road, which is winding and narrow and not fit for heavy vehicles. Where it lay it was on the wrong side of the creek, so to speak. One of the workmen told me that they would soon start the work of making the deep cut for the creek through almost the highest part of reserve – the western side. Once the creek is running through its new channel, the wood and piled up soil would no longer be on the wrong side.

Guinea fowl – still there.

I thought this was a neat solution, but it is not the whole story. On the 20th of February, I biked along Alan Wood Reserve to see what changes there had been in the previous week, and there I saw that a bridge was to be built across the creek, on the south eastern side. Foundations were being laid with a protective lining, I was told, to stop the gravel from washing into the creek in the event of heavy rain. I hope they know just how high the creek can get after a prolonged spell of heavy rain.

On the northern side of the triangle, some of the weedy area has been left uncleared. Whether this is to leave at least some of the pukeko's habitat or simply not yet part of the grand plan I do not know. On a walk along that part of the creek on 2nd February, I spotted the guinea fowl and its pukeko friend, safe for the time being. I. will be following further developments with interest and the camera at the ready.

*The flowers above are, from left to right: pohutukawa (*Metrosideros excelsa*), putaputaweta (*Carpodetus serratus*), ribbonwood (*Plagianthus betulinus*) and rewarewa (*Knightia excelsa*).*

Photos: W. John

Oakley Creek Te Auaunga Quiz

1. Approximately how long is Oakley Creek Te Auaunga?

2. There are two types of reptile found at Oakley Creek, one native and one exotic – what are they?

3. How high is the Oakley Creek Te Auaunga waterfall?

4. Name at least two of the worst environmental weeds which threaten the restoration of the Creek's streambanks.

5. What is the insect species which is monitored by Friends of Oakley Creek Te Auaunga to help measure the effectiveness of the pest control programme?

6. What is the name of the park in the upper catchment which is adjacent to a golf course?

7. What is the volcanic rock type found along Oakley Creek, which has been used to line the channel in places?

8. What are the names of at least four parks or reserves along Oakley Creek Te Auaunga?

9. When was Friends of Oakley Creek established?

10. How much is the annual subscription to Friends of Oakley Creek?

Check your answers at the end of the newsletter.

As part of this course the students will be involved in tree planting on Oakley Creek. For more information, go to www.thetreecouncil.org.nz

Fungi are flourishing ...

This summer has been an unusually wet one, as demonstrated by the proliferation of fungal fruiting bodies growing along the creek. Thanks for these images from John Maskell, who photographed the top three and Wendy John for the remainder.



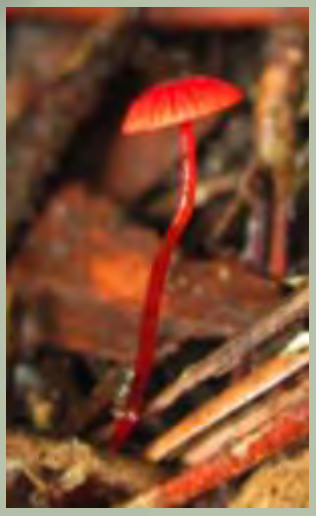












My memory of the Oakley Creek - 1940s by Tony Goodwin

I recently, for the first time, did the Oakley Creek Walkway. During the 1940s, I lived at 43 Alford Street, Waterview. This was the Goodwin family home, built for my paternal grandfather in 1908. We had recently returned from Lithgow, Australia, and my father was still overseas with the RAAF. My mother worked at "Male 9" at the Whau (Avondale Mental Hospital), and we three children used the hospital grounds, including the creek, as our playground. In fact, the length of the creek, from the railway bridge to the mouth, was our playground, as we could walk home from Avondale Primary School (before there was a school at Waterview) via the railway line, down the side of Phyllis Street tip, past the waterfall, and cross over the Great North Road at Alford Street. Below what is now the BP Station, there is still a roadway that goes down to the creek, and there used to be a wooden bridge here. We would sometimes wait here for my mother to come off work, or we would chat to patients, who would kindly share their cigarettes with us. (The war was on - it was hard for anyone to get cigarettes let alone a nine year old.) Or we would fish for "cucumber fish", yes, cucumber fish. Tiny fish the size of a finger. I have subsequently found that they are in fact "adult" whitebait and if you got enough of them, they made a tasty meal.

Above top: Remains of the old railway bridge; above: Remains of the old bridge below the BP petrol station. ***Photos: W. John***

Then, below the bridge, is the culvert that goes under the Great North Road. Not having seen it close up for sixty-seven years, I can't say it has changed much. This lower portion of the creek we also explored from our dinghy that was kept at the bottom of Alford Street. We frequently fished for sprats at the mouth of the creek (now changed by the channel they put through when building the motorway). On a good tide, we could row right up to the culvert under the road, and we would do this while setting a flounder net. We caught a number of flounder and would sell them door-to-door for two shillings each. On the true left bank above the culvert there were three old workmen's cottages, one of which was a well-known house of ill repute. We watched our uncle cutting the lawn there once, which caused us great hilarity. We were quite worldly in spite of our age.

Above: Downstream from the culvert under Great North Rd, the stream opens out into the estuary.
Photos: top - T. Goodwin; bottom - W. John

Further down the creek, on the true right bank, was the opening to an old flooded quarry, which I can no longer find. There was a concrete race that allowed it to flood and drain with the tidal movement. So it is sixty-seven years since I last walked the Oakley Creek, if only we had such a marvelous track in our youth, but then we did have the creek mostly to ourselves so there was some compensation to our wild scrambles.

Remains of the old quarry below the Great North Rd culvert. ***Photo: W. John***

This stunning quilt will be on display, along with some live specimens, at Auckland Zoo during Seaweek, March 5th - 11th, to help promote awareness of the endangered longfin eel and encourage people to sign a petition to save the eel. More information about this native fish and a link to the petition can be found at **http://www.longfineel.co.nz/longfin-tuna/**

Weed Watch

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

Hedychium gardnerianum, Zingiberaceae – wild ginger, Kahili ginger

Wild ginger originates from east India. With leaves which resemble the canna lily, it produces spectacular yellow flowers with scarlet stamens in late summer. The orange fleshy fruit contain many red seeds, which are dispersed by birds such as tui and blackbirds. The only good news is that the seed is viable for just two to four years. Unsurprisingly, the plants smell of ginger and produce rhizomes which look like the culinary variety. (Wild ginger is edible as well, but we do not recommend eating it from Oakley Creek, where it may have been sprayed with herbicide.) It is closely related to yellow ginger (*H. flavescens*), which is also a problem weed at Oakley Creek - but slightly less so because yellow ginger does not produce seed.

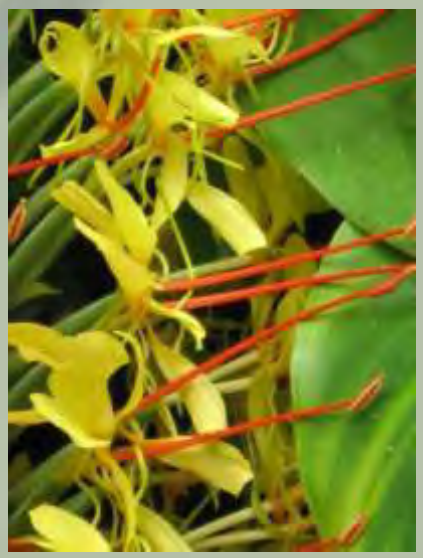
Wild ginger is listed as a pest plant because it grows fast, tolerates shade and lives for a long time. It is drought and frost tolerant. Auckland botanist, Alan Esler, has described how wild ginger grows in his book *Wild Plants in Auckland* (2004, Auckland University Press):

'On the margin it flowers and seeds profusely. As the plant community grows, creating more shade, the kahili ginger loses its seeding capacity, then fails to flower. In optimum conditions, its stout rhizomes branch at a wide angle. When they encounter older rhizomes they ride over them and build up immense rhizome masses. The new superficial runners bear erect leafy shoots along their new growth, many of them with flowers. After the flowering season, most aerial parts die back to the ground; those that do not then flower, overwinter and flower the next summer.'

Wild ginger smothers other plants. The dense leaves create deep shade, while the rhizome masses can be a metre deep. These masses are impenetrable, preventing any regeneration by native species. Wild ginger is also invasive through the tropics. In Hawaii, scientists are investigating the use of NASA high altitude imagery to map the spread of wild ginger, ahead of attempts at control. It can be distinguished from the Hawaiian native forest vegetation by its higher water content.

This wild ginger has been cut and sprayed, but is re-growing regardless.

Photos: A. Stanton



Control: Seedlings and small plants can be pulled or dug out, but any rhizomes and seed heads need to be sent to landfill, not composted. Weedbusters report that any rhizome fragment can resprout, even after immersion in seawater, crushing or years spent out of the soil. Large plants need to be sprayed or cut off horizontally at the base and painted with herbicide. As always, it is necessary to keep checking the site for re-growth and new seedlings.

Wildlife encounters

Photos: Top left – D. Bowden; remainder – W. John.

Two Kingfisher chicks in a hole in an old tree trunk.

Grey warbler's nest.

*This woolly bear caterpillar (*Nyctemera *sp.), seen feasting here on ragwort, is the larval stage of the magpie moth.*

Damselfly.

Inanga, spotted 'hanging out' in the Unitec 'drain' in Cabbage Tree Swamp.

Art flow

Trash or Treasure? – found amongst the trees down the creek.
Photos: W. John

Out and about

Photos: W. John

Harbutt Specimens – 50 'left over' specimen street trees, including pohutukawa, karaka, kohekohe and puriri, were planted around the top edge of Harbutt Reserve at the end of the planting season. Thanks to Bruce Edwards, from Auckland Council, for organising these.

Weedbusters, Jean, Keith and David tackled some nasty weeds in Phyllis Reserve.

The weather was cool and breezy for our **Friends of Oakley Creek Te Auaunga end of year party**, but the feast and fellowship were fine and warm!

Conservation Volunteers helped out with weeding around the top of the waterfall (bottom left) and the streamside plantings in Harbutt Reserve. Thanks again, to Conservation Volunteers for their contribution to our project.

"Unless someone like you cares a whole awful lot, nothing is going to get better. It's not."

- Dr Seuss.

Community working bees take place on Sundays at the beginning of each month – whatever the weather: December rain or February sun! Thanks for caring.

In December, Wendy John gave a guided walk down the stream and a briefing on the restoration for **Open Polytechnic** students and their tutor, Carol Elliott (below, second from right).

A planning meeting (right) for a **'wetland' project** at the top of **Molly Green Reserve** in Mt Roskill was attended by representatives from Puketapapa Local Board (which is funding the project), Auckland Council, contractors and Friends of Oakley Creek.

Also in December, **Maori TV** crew (left) recorded music by the waterfall to accompany a programme on Maori proverbs.

Jagjeeta Kaur with Wai Care, Kath Read and Taryn Pearce (right) regularly check the **stream water quality**.

Puzzle Solutions

Five finger vs seven finger

The only way to definitively tell the difference between five finger (left), *Pseudopanax arboreus*, and seven finger (right), also known as pate, *Schefflera digitata*, is by looking at the flowers and fruit. However, the leaves of seven finger are 'less glossy, softer and generally scruffier' than those of five finger (Foster, T. 2008. *Plant Heritage New Zealand Te Whakapapa o nga Rakau: Interpreting the Special Features of Native Plants*. Penguin. North Shore, New Zealand.).

Five finger flowers (left) are arranged in umbels – umbrella shaped groups – while seven finger flowers (right) are borne on long racemes.

Photos: left, W. John; right, A. Stanton.

Oakley Creek Te Auaunga Quiz

1. The stream is about 15 km long, from its headwaters in Hillsborough to Waterview, where it enters the the Motu Manawa Marine Reserve in the Waitemata Harbour. It is the longest stream on the Auckland isthmus.

2. The native copper skink and the Australian rainbow skink are the two types of lizard which are found at Oakley Creek.

3. The only one on the Auckland isthmus, the Walkway waterfall is about 6m high – depending how much it has been raining!

4. Many weeds are a problem at Oakley Creek. You may have chosen from the names bindweed, morning glory, *Convolvulus, Tradescantia*, wandering jew, moth plant, woolly nightshade, tobacco plant, *Acacia*, wattle, privet, honeysuckle, climbing asparagus, hemlock, African club moss, ginger, tutsan, palm grass, ivy, *Montbretia*, onion weed, castor oil plant, bamboo, madeira or mignonette vine, agapanthus or many others. Some of these names are synonyms for the same weed. The weeds have not been listed in any particular order.

5. The Auckland tree weta poulation is monitored by checking the occupancy rates of artificial weta homes, which are located in areas with and without pest control along the Walkway.

6. Keith Hay Park borders the Akarana Golf Club. Mt Roskill Intermediate have planted native species to shade an Oakley Creek tributary in this area.

7. Basalt.

8. The area of parks and reserves surrounding Oakley Creek add up to nearly 50 hectares: Freeland, Molly Green, Keith Hay, War Memorial, Walmsley, Underwood, Hendon, Alan Wood, Harbutt, Phyllis and, Oakley and Waterview Esplanades.

9. 2004.

10. The Friends of Oakley Creek individual subscription is only $10.

We gratefully acknowledge the support of ASB Community Trust, Ministry for the Environment, WWF-New Zealand, The Tindall Foundation, Auckland Council, Community Organisation Grants Scheme (COGS) and The Lion Foundation.

Next Newsletter

News, articles, contributions and comments for the next newsletter are welcome and can be sent 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 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.

Friends of Oakley Creek
Te Auaunga

Chairperson: Wendy John Treasurer: Jane Shand Secretary: Richard Nightingale
Committee: Heather Docherty, Ross Ihaka, Dorothy Maddock, Helen Mellsop, Alicia Warren.
Newsletter Editor: Adrienne Stanton
Ph. 09 - 815 – 3101 **info@oakleycreek.org.nz** **www.oakleycreek.org.nz**