

AUTUMN 2018
Newsletter No.53



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Newham & District Landcare Group



Working towards a
healthier environment

Address – PO Box 314, WOODEND, 3442



Raptors – Kings of the sky

DIARY OF EVENTS

Winter is always the quietest time of the year for the group but event frequency will pick up again after the AGM. Let one of the committee know if you have an area of interest or a suggestion for an event.

AUGUST

Friday 17

AGM Newham Hall

7pm, drinks and nibbles. 7.30 AGM.

7.45pm. Guest speaker Mark Bachman (Nature Glenelg Trust). 'Bringing back the Brolga: Swamp restoration in the southern Grampians'.

SEPTEMBER

Saturday 8

Cobaw biolink – information session for landowners

9.30am – 11.30am. Newham Hall.

This presentation by Dr Jim Radford will include: *Benefits of revegetation in restoring rural landscapes; Principal approaches to planning landscape restoration; Guiding principles at both the individual property and landscape levels; Q & A on the Cobaw Biolink; Funding support and the Expression of Interest process.*

(UDCN facilitator Tim Read and Penny Roberts).

OCTOBER

Sunday 14

Hands-on session at Hanging Rock Reserve

9.30am – 12.30pm. BBQ lunch to follow.

The reserve has a very large population of kangaroos, along with wallabies and residual rabbits, making it a real challenge to establish under-storey and ground layer plants. Come and see how our plantings have fared, look at alternative protection methods and give a hand with some planting and maintenance along the creek.

Group contacts

President: Nick Massie. **Vice President:** Karl Kny. **Treasurer:** Hilary Roberts.

Committee members: Doug Dalgleish, Penny Roberts, Jim Sansom and Howard Stirling.

Please consider nominating for the committee as there are spaces vacant.

Secretary, Website: Helen Scott.

New members, Propagating Group, general queries: Penny Roberts; 5427 0795.

Roadsides: Sue Massie; 5427 0065.

Newham Primary: Jenny Waugh; 5427 0408.

Animal pests: Replacement to be confirmed. *Thanks to John Luckock for his contribution to the rabbit eradication and Indian Myna programs. We wish him all the best for his move to Barwon Heads.*

Wesley Park: Fran Spain; 5427 0661.

Flora, library, small tools, grants: Penny Roberts; 5427 0795.

Spray trailer: Currently held by the Roberts family. Contact Penny on 0418396837.

Website: <http://www.newhamlandcare.info/>

The committee meets on the first Monday of the month (February to December) between 7.30 – 9pm in Newham. All members are welcome to attend the Committee meetings to become more involved or raise specific matters. Please advise a committee member if you wish to attend. Meetings start and finish on time... and we enjoy them!

Why isn't a Kookaburra a raptor?

**and other things we learnt from Leigh Valley Hawk and Owl Sanctuary presenters
Martin and Talia when they visited NDLG in May.**

Leigh Valley do mobile raptor displays 'with an elite team of trained birds of prey' that were born in captivity, with underlying themes of conservation of native biodiversity, ecology and sustainable living.

Their presentation, that included 4 types of raptors as discussed later, was amazing – and even more so when we were joined by a wild Nankeen Kestrel and Wedge-tailed Eagle checking out the competition in their territories!

A raptor is defined as a bird of prey, ie a strong bird that feeds on smaller birds or animals. The term raptor is derived from the Latin word rapere, meaning to seize or take by force.

Many birds catch and kill other animals for food. For example Storks, Gulls and Kookaburras, **but they are not raptors.**



What distinguishes raptors from other birds that catch and kill other animals for food?

Raptors have excellent vision that allows them to detect their prey during flight, powerful feet for holding food, sharp curved talons for catching and killing their prey and a curved beak for tearing flesh.

Storks and seagulls which catch and kill fish, are not raptors because they only use their beaks to catch and kill their prey. The same is true of Kookaburras.

How can we prevent needless deaths of raptors?

All raptors sometimes eat roadkill, and so are at risk of being hit by cars.

So... if you see a dead animal on the road, STOP and remove it to the roadside so that no raptor will be killed whilst feeding on it.

All raptors like mice and rats, and so are at risk of being poisoned if you use bait for rodents.

So... use snap traps instead of poison. Or invest \$30 in a walk-the-plank rat trap from *It's a Trap* in Kyneton.

The Nankeen Kestrel...

a super bird! Fly, hover, UV vision – what more could a bird want?

Jedda was a captive bred bird and is a human imprint – meaning that she thinks she's a human or that humans are birds. After she arrived at Leigh Valley in 2016 she learned extremely quickly to fly to and from the glove for rewards. She tends to use people and large camera



Jedda finding a comfy perch on Bruce.

lenses as fence posts during displays, which can be exciting for the audience. We had been warned to stay still and quiet if she landed on us as otherwise she might reflexly grip harder, as she would a moving prey animal.

Nankeen Kestrels are Australia's smallest falcon, weighing in at about 150g. They are masters of hovering flight and are often seen suspended in the wind over paddocks, grasslands or roadsides scanning the ground for mice, lizards or other small prey. Mice are constantly dribbling urine to mark their territory – and this can be seen by Nankeen Kestrels at night as green trails across the ground!

Australian Hobby

The Australian Hobby is another high speed falcon that catches birds in mid-air. A similar size to the nankeen Kestrel, but more solid with longer wings and bigger feet.

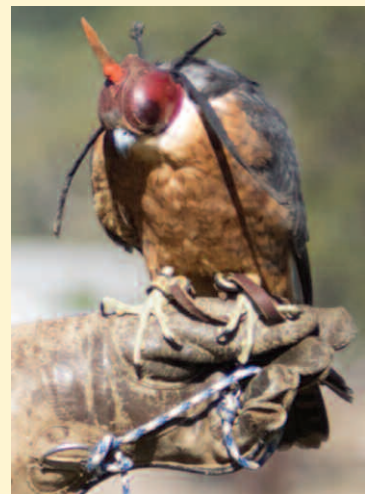
Hobbies are agile little hunters capable of catching dragonflies and small birds on the wing. These birds are so visually oriented that they are not fearful of what they cannot see. The purpose of a hood is to calm the bird.



Top: Martin with 'Pickle'.

Left: 17th century falconry hood made of leather with velvet panels embroidered with metallic yarns and metal beads, and topped by a silk tassel. (Smithsonian Institute).

Right: 'Pickle' in her hood.



Falconry. . .

is the hunting of wild animals in their natural state and habitat by means of a trained bird of prey. There are records showing that falconry was practiced in Asia and the Middle East as long ago as 2000BC but did not become popular in Europe until the 17th century.

The sport was a status symbol among the nobles of medieval Europe, the Middle East and the Mongolian Empire due to the commitment of time, money and space required. Within nomadic societies, like the Bedouin, falcons were trapped and hunted on small game during the winter months in order to supplement a very limited diet.

Barking Owls

Skeksi, the juvenile Barking Owl that came to Newham, demonstrated the 'Barking Owl rap dance'. Owls have large forward-facing eyes that are modified for sensitive vision in poor lighting conditions, but are fixed in their sockets. They make up for this by having very flexible necks and are able to rotate their heads through up to 270 degrees, resulting in a capacity for crazy head movements. Night hunters, Barking Owls also have excellent hearing and their feathers have a special adaptation that makes their flight silent.

Barking Owl calls. The young Skeksi called for food for most of her time in the show – the characteristic barking 'woof-woof' call is heard from older birds. The alarm call of these birds sounds like terrified human screams, good to know if you're in the bush at night!

This is a threatened species in Victoria, with the last official count noting only 50 pairs existing in the wild. Barking Owls were recorded at Newham in 2006 when the landcare group conducted a baseline biodiversity study across the Jim Jim. Mature trees are very important to their survival as they provide refuge and nest sites.

Barking Owl diet. Barking Owls feed on a variety of small to medium-sized mammals, birds, reptiles and insects. Diet is largely insects during the non-breeding season, with larger prey more commonly taken when breeding. Prey is located either from the air or from an exposed perch.



Talia with Skeksi, a juvenile Barking Owl.

Breeding: Barking Owls raise a single brood in a season. The nest site is an open hollow in a tree trunk, loosely lined with sticks and other wood debris. The female incubates the eggs, while the male supplies the food. Young Barking Owls remain dependent on their parents for several months, and will remain in the family group until a few months before the next breeding season.

Wedge-tailed Eagle

We learnt that Wedge-tailed Eagles have the longest wingspan of any eagle on earth – from 185cm to 230cm – however it is only the fourth heaviest 'booted' eagle in the world. They darken with age, grow much bigger in southern Australia than in the north and live up to 15 years in the wild. As with all birds of prey, males are smaller than females.

Wedge-tailed Eagles eat both live prey and carrion, with their diet reflecting the available prey. The most important live items are rabbits and hares. Rabbits usually comprise about 30-70% of the diet.

Wedge-tailed eagles can spot a rabbit from 1.5 km away and the tendons in their legs have evolved a ratchet like mechanism that locks the toes in place preventing prey from escaping! Other food items include lizards, birds (weighing over 100g) and mammals (usually weighing over 500g). Carrion is a major food source; roadkill and other carcasses are readily eaten.

We saw Yarrum rewarded with a feed of rabbit and learnt that the bones and hair would be spat out later, and that he likes to rest after a big feed. Eagles feed their young directly with meat from the very start, tearing pieces from an animal they have caught.



Martin with 'Yarrum', an 11 year old Wedge-tailed Eagle from Alice Springs.

Breeding: Wedge-tailed Eagles are monogamous and apparently mate for life. If one bird of a pair is killed, the survivor will find a new mate. Established breeding pairs are territorial and live in the one area throughout the year, defending around their nest sites from other Wedge-tailed Eagles. Surrounding the territories are large home ranges in which the birds hunt for food but do not defend. There is usually overlap between the home ranges of two or more breeding pairs and of non-breeding birds. The nest is a large structure of dead sticks, usually reused for years, often reaching considerable size. Nests 1.8m across, 3m deep and weighing about 400kg are known.

Climate Change_

How Forestry can help save society (continued)

In the last newsletter Karl Kny (retired CEO of HVP Plantations) gave a summary of the first part of his presentation at Newham Hall on Climate Change and how forestry can help. It covered the role of forestry and key recommendations of the climate scientists appointed by the United Nations.

Given the recommendations of the climate scientists on the importance of sustainable forest production to absorb and store carbon, there is a major global trend with the use of wood to replace concrete, steel, aluminium, plastics and to replace fossil fuels. The next part of Karl's presentation is given below.

Build in wood and save the planet
by Tim Roberts

Professor Tim Roberts is the director of the Tom Farnell Institute for the Environment, University of Newcastle.

TIMBER & FORESTRY NEWS 1 June 2017

Lifecycle Analysis

Timber versus concrete

- Cost savings, built by carpenters in a couple of weeks
- Transport savings - timber requires one-fifth of the truck movements
- Less waste;
- Quieter, cleaner building sites
- Per tonne - Two tonnes of carbon removed from the atmosphere vs. one tonne of carbon generated

The Guardian, Architecture Observer 28/1/2018

1) Global Trends in the use of wood for building construction.

- A lot of analysis has occurred comparing the attractiveness of using timber versus other building products such as concrete and steel and there are major changes occurring in building construction.
- For example using timber versus concrete results in significant cost and transport savings, less waste, quieter and cleaner building sites and on a per tonne basis one tonne of timber removes two tonnes of carbon (CO₂ equivalent) from the atmosphere, where producing one tonne of concrete emits nearly one tonne of carbon into the atmosphere.

- A key global trend is the use of Cross Laminated Timber (CLT) in the building of high rise structures. In 2013 the tallest timber apartment building in the world (the 10 storey Forte building) was built in Melbourne Docklands using CLT.
- Australia's first CLT manufacturing plant is currently being built by Xlam in Wodonga.
- CLT is fire resistant because of its charring and

Wooden skyscrapers make their mark across the world

Wooden skyscrapers are cropping up in cities all around the world. Thanks to cross-laminated timber, these structures are just as resilient as buildings made from steel, and put much less of a strain on the environment.

and not least of which are its major benefits in terms of the environment. Estimates published by the U.S. Green Building Council state that as much as 39 percent of carbon emissions in the U.S. are the result of the construction of buildings and their usage. Wood is

Norway built

The Teet, a fourteen-storey construction in Central Bergen, Norway.

Sweden proposed for 2018

France's "Hyperion" to be completed 2019

self-insulating ability. It is typically precut, lifted into place and bolted together by carpenters in a fraction of the time of building a concrete and steel building.

- There are now many tall timber buildings around the world (including Australia) and the trend is increasing.
- In addition there is a particularly exciting global trend occurring with Vertical Forests – residential towers with surrounding verandas of forests and gardens on each level. Such towers have been built in Italy and are planned for China.



2) The Human Element of living with wood.

- Planet Ark (an Australian environmental organization) has recently completed a global study and interviewed Australian's on the benefits and opinions on the use of wood and nature connected design. In summary their findings are that wood:

- * Improves air quality by moderating humidity
- * Improves emotional state and self-expression
- * Reduces stress response (pulse rate and blood pressure)
- * Helps to reconnect us to nature (biophilia)

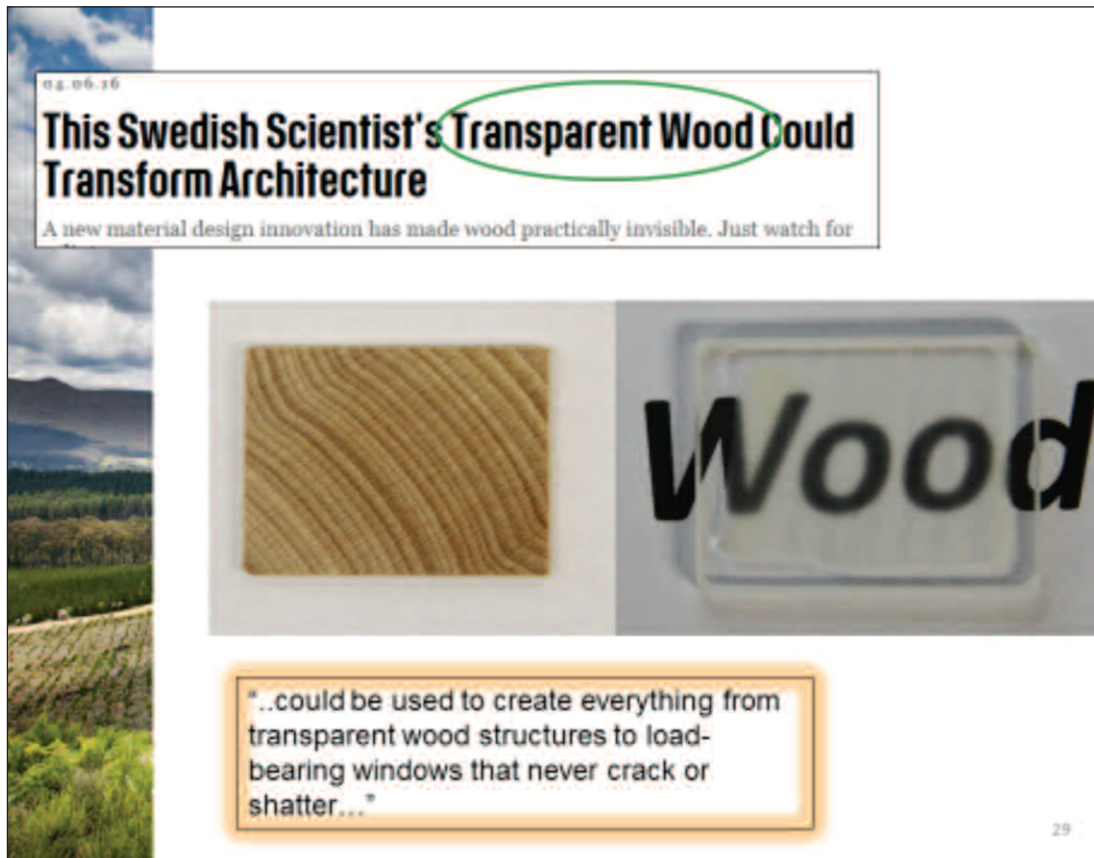


- Planet Ark also noted that Australians are confused about wood certification.
- Certification ensures that wood comes from legally harvested and well managed forests and plantations. Certified forests are managed with environmental, social and economic factors as priority and ensure that when the tree is harvested another one is planted in its place. Without certification it can be difficult or impossible to know whether wood was taken illegally or from high conservation value forests. Please always ask and check for certified wood.

- Wood Encouragement Policies are becoming popular around Australia and the World. Twelve Australian councils, as well as local and State governments have adopted Wood Encouragement Policies which generally require responsibly sourced wood to be considered, where feasible, as the primary construction material in all new-build and refurbishment projects.

3) Global Trends in non-construction uses of wood.

- Practically anything that can be made from hydrocarbons (oil, gas, coal) can now be made from wood. Global production of biobased products, such as biofuels, chemicals and polymers is expected to reach in the order of US\$400 Billion by 2020. The first commercial flight using jet fuel made out of alcohol derived from wood scraps occurred in 2014.
- Even products such as Transparent Wood have been developed which could transform architecture with load bearing windows that never crack or shatter.

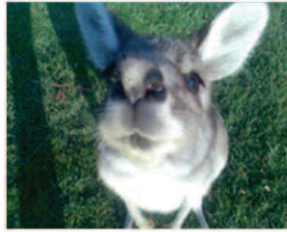


- Renewable energy from burning wood waste from sustainably managed forests is considered carbon neutral. When the wood is burnt it emits the CO₂ back into the atmosphere that was absorbed during its growth. There is a large international market developing in wood pellets for heat and electricity production.
- In Gippsland an Advanced Bio-Manufacturing Facility is being proposed at the Australian Paper site. This would entail taking landfill waste from Melbourne to a new Waste to Energy Plant and redirecting the lignin from the pulping of wood to a new bio-manufacturing facility. As part of this proposal the Victorian Government has budgeted \$110 million to establish plantations in the Latrobe Valley.

So.... if society likes, wants and needs more wood..... to remove and store CO₂, to replace concrete, steel, aluminium and plastics, and to replace fossil fuels.....where is the wood going to come from?

In the next newsletter we will explore current trends in the development of more plantations in Australia and the implications and opportunities locally.

**Brigitte's
Wildlife
Blog**



Recently Karl and I attended a symposium about wetlands in the Western District and during the field day – what did we see (apart from absolutely fascinating swamps, wetland – and even 2 Brolgas !!) – YES we saw emus.

When we bought our place decades ago, emu farming was the 'in-thing' to do. No – we never farmed emus – we only had two pet emus which we picked up really cheap after the emu market collapsed. Kuna the boy and Karta the girl (named after Aboriginal words 'to kick' and 'black') were just adorable little stripy things and they followed us everywhere and snuggled close to the kids when they got sleepy.

Kuna and Karta had this weird love/hate relationship with our dog and they used to chase each other. Good ol' Bruce the Kelpie tried regularly to bite into their bum feathers and then ran off into the distance



with Kuna and Karta in hot pursuit trying to kick him. Or the two emus stalked the sleeping dog and nipped his collar or his ears and then ran off with the dog going full pelt after them trying to bite into their bum feathers. It was incredibly entertaining to watch.

Their 'nipping' became a bit of a nuisance once they grew a bit taller and could reach OUR ears and earrings. They were also just fascinated with clanging bracelets, moles on necks or legs, rings, newspaper – basically ANYTHING they had not seen before plus ANYTHING they had seen and were still fascinated

by it. One time Karta ate Karl's stubby screwdriver. Fortunately her digestive system quite quickly returned it to us with no damage done.

We had at one stage quite a few trades people at our place. Kuna fancied all those little pink and blue connection bits out of the electrician's toolkit and ate most of them before the guy quickly shut the box. And Karta just adored the painter and stayed close to him watching him dip the brush into the tin – then apply the paint to the wall – dip the brush – paint. And of course she dipped her head into the tin as well but, as the paint must have tasted rather awful, shook her head and flung globs of paint all over the painter and the wall. And by the time we were mixing concrete we had totally barricaded us and the tradies in to protect us from those nosy birds.

Kuna and Karta were rather social birds and loved to hang out with us and to accompany us into the paddock either when we were planting trees or hitting a few golf balls across the bare paddock. Once we had friends over for a fun 'Golf Tournament' and the emus got extremely excited and kept chasing the balls and were running away with them. Of course we screamed and ran after them (it was a rather tight score) and Kuna dropped the ball – and the ball rolled into the hole !!!! Honestly – I swear that is true !!!!

The friends and us had arguments for years after that if that counted or not till one day on the ABC radio there was this golf rules expert as a guest on the morning program. So I rang the station and inquired about such a situation. I think they thought me some sort of a nutter – but anyway the answer was 'YES' it's a valid hit/drop just like the ball would bounce off a tree and it counts.



And the emus just LOVED to play in the water. We have this pond next to the house and they used to walk in, plunge down, roll sideways, get up and shake themselves and become excited and chase the dog. And once our daughter had her friend over and both girls spent most of the time in the spa. The emus sat next to them on the rim and waved their chest in the warm water – and yes, you guessed it – eventually jumped in and joined the girls in the spa.

Kuna and Karta could roam our property all day long but at night or when we were away we locked them up in this rather big enclosure. All seemed well – but then they started to grow up and mature. Kuna started to strut with his chest feathers all puffed up and his neck rather tense in a question mark position. He also made this deep boom-boom-boom sound with that air sack at the chest.

By the way it is just beautifully warm when you put your hands in-between the emu feathers close to the skin. And emu feathers are quite special in that two feathers grow from the one quill and the feathers are so soft and flexible because the vanes are not held together by barbs like on most other bird feathers.

Over time Kuna and Karta got more and more restless and not only roamed our place – but got over the fence to the neighbours. I can't remember how often we had to jump into the car, drive to the neighbour and then herd them on foot back to our place. And to keep up their interest in accompanying us we snapped twigs, rattled bushes, clanked rocks and pebbles – but we also had to be careful not to excite them too much. They then would throw back their heads and start running. Forward was good – back to the neighbours was not.

And then one day Karta started to lay eggs; I still have her first egg, a lot smaller than the rest. As my license allowed us to have 10 emus (which I REALLY did not want) Karl persuaded me to let Kuna (our male) sit on them. And so Kunsie sat on them devotedly for weeks without eating till one day two little chicks hatched. Kuna just did not know what they were and trampled them. It was quite upsetting for all

of us and the following years we removed the eggs, blew them out and had them for scrambled eggs in the morning (1 egg for 8 people, add bacon or salmon, parsley and gently fry in truffle butter. Serve with spinach, fried tomatoes and toast. Cheese optional. Yummie! tastes just like egg except fluffier.).

The first time we blew out the eggs we drilled by hand two holes at the top and bottom – then pressed our lips to one end and BLEW. After the fourth egg the whole family had serious aches in the cheek muscles and we used our power drill and the tyre air pressure pump to empty the eggs. Worked like a dream.

Kuna really did not like that I removed his 'children' and started to become rather aggressive towards me – not just in egg-laying season but throughout the year. Whenever I came close to the enclosure he charged towards the fence and trampled furiously and displayed all sorts of hostile behaviour. Never though with the rest of the family – that blasted emu continued to be gentle and affectionate with them.

Often we kept wondering why Karta the female was out of the enclosure till one day I observed incredible 'emu-domestic-violence' where Kuna chased Karta and she – in absolute panic – just ran up and over the 2 meter high fence. She stayed close to us till Kuna eventually snapped out of his aggression. And I still believe the reason why in the wild the girls leave is not that they desert the males and the eggs and 'wink-wink' meet up with other boys. They simply get chased away.

Karl and I have the occasional discussion whether we should have emus again. Needless to say that I have this 'not-on-my-watch' attitude. Even if he comes up with his theory that the seeds of the Matted Flax-lily *Dianella amoena* have to pass thru emu guts to be able to propagate and that's why they are endangered here in our emu-less region.

Kitchen Garden Weeds Program

On Friday 8 June, Grades 5 and 6 had a specialist session given by Carol and Mr. Harrison. The session was about weeds, the different types of weeds and their survival tactics.

The students started off by watching a clip by David Attenborough that showed how plants compete. The most interesting and fun bit was working with the Kitchen Garden groups because we had an interactive activity where we acted out different plants and their features. We learnt that weeds can be poisonous, have weapons, can strangle and cover other plants to block sunlight from them to kill the plants under them.

There was a lot of enjoyment in the classroom and the pressure was intense. Kids gained a lot of knowledge about the different types of weeds and what made them a weed.

We learnt:

- How to identify types of weeds.
- How they are different and compete differently.
- What they do.
- How to identify them.

Thanks to Newham and District Landcare for funding this session and thanks to Carol and Mr Harrison for teaching us.

Chloe, Oliver, Elke and Charlie.



Native Plants for sale in 2019

Cheap indigenous native plants in forestry tubes will continue to be available to Newham Landcare members in 2019. Members will be notified in early Autumn and Spring when plants are ready for distribution.

These plants will be grown by volunteers (Newham Primary parents, Landcare and community members, led by Penny Roberts) to fill orders for the new Braemar campus and participants in Landcare projects, with the surplus available to our members at 50c.

We have always had a generous surplus available for members, and a broad mix of species. BUT if you want something in particular it would be advisable to let Penny know, preferably by the end of October.

This propagating project was initiated by the Landcare group as a way of raising awareness about local plant species and supporting the school parents in raising funds to undertake landscaping works in the school grounds after completion of the new buildings.

For the past 8 years we have grown to order for Melbourne Water and funded Newham Landcare projects, to raise \$\$ for landscaping in the Newham school grounds. An amazing \$64,000 to date!! Added to this has been funds raised by the Newham Garden Club, with the end result being a wonderful community asset.

The latest additions to the grounds were some ferro-cement sculptures, in the south east corner of the school underneath mature *Pinus radiata* trees – a Powerful Owl, two hollow tree stumps and a dragon head from the stone skeleton that was installed in early spring 2017.



You would be amazed at just how much hard rubbish can be compressed into the space enclosed by the 7 tyres used as the base for this sculpture. Likewise the owl is full of hard rubbish that would otherwise have been destined for land fill.



One of the two stumps created – children can crawl inside and peep out of the 'spouts'

The Powerful Owl, now keeping watchful eyes on Newham Primary. This threatened species is being studied as part of the local citizen science project that was discussed in our last newsletter.



NDLG Pest Animal Update June 2018

Hello Everyone!

I have recently volunteered for the Pest Animal Coordinator role for the NDLG, a role vacated by the departure of John Luckock for Barwon Heads. I'm looking forward to working with the group in two main ways:

- enabling members to prepare pest animal management plans for their properties.
- coordinating community responses to pest animals.

I put my hand up for this role because I have more than 20 years' experience of pest management in food manufacturing. That experience has been invaluable in putting together my Farm Plan*, and it's something I can share with others, whether they are farming or not.

In the next few months I plan to:

- link a set of useful resources for a variety of pest animals on our NDLG website.
- run an information session on pest animals and integrated pest management..
- run a workshop on pest animal management plans.

These activities will be suitable for all property types within Newham and district, not just farms. Watch the NDLG newsletter and *Newham Newsflash* emailed newsletter** for further information.

Sue Barker

* For more on Farm Plans, see <http://agriculture.vic.gov.au/agriculture/farm-management/business-management/whole-farm-planning>.

** If you don't already receive the newsletter, contact Hilary Roberts at hproberts@bigpond.com to be added to the distribution list.

Calici virus vs Myxomatosis: both are present in our district

Release of Calici virus 'K5' at Newham was undertaken by NDLG earlier this year, with four sites spread across the district in the hope that the virus might become established and then spread naturally through our rabbit population. This virus is a variant of the existing calicivirus already established and widespread across Australia and it can be very fast acting, causing death with no sign of illness. It is not a 'silver bullet' – it is expected to make a reduction in overall numbers by perhaps 20%. **An integrated program is essential for control of rabbits.**

Rabbits are Australia's worst vertebrate pest species, causing up to \$200 million in lost agricultural productivity annually and contributing to the destruction of native vegetation.

Note that pet rabbits can be protected from K5 by vaccination.

There are four known caliciviruses in Australia:

- RHDV1: escaped from quarantine on Wardang Island, SA, in 1995 and officially released following year. Killed up to 90 per cent of rabbit population.
- Benign calicivirus: not known how long it has been in Australia. Does not kill rabbits but enables immunity against other caliciviruses. More common in cool, wet districts..
- RHDV2: first identified in ACT in 2016. It is not known how it came to Australia. The current vaccine doesn't protect against it.
- RHDV-K5: Korean strain, was released nationally in March 2017.

Confirmation of virus type can be made by sending the liver for testing.

Myxomatosis is caused by the Myxoma virus, introduced into Australia in 1950 in an attempt to control the rabbit population. The virus initially killed rabbits very quickly but, as predicted, the impact of the virus declined over time as both the virus and the rabbit population changed genetically.

Rabbits infected with myxomatosis will generally suffer from conjunctivitis their eyes will be swollen and have a discharge.

In late June a wild rabbit infected with Myxomatosis was taken to a vet in Kyneton and a rabbit with conjunctivitis has been reported on a property near Hanging Rock.

TO THE BEACH AND BACK



The Grade 5-6 classes of NPS headed to the beach for their school camp in May to explore the habitats and local wildlife in and around Queenscliff.

While we were there we were guided through the coastal dunes, local rock pools at low tide, and conduct a beachcomb along the shore of Port Phillip Bay.

We were also treated to a session at the excellent Queenscliff Marine Discovery Centre where the kids were able to have a 'hands on' session in a touch pool. The students were able to touch and hold crabs, sea snails, sea urchins, shrimp, shark eggs, starfish, seaweed and sponges. It was amazing!

Since being back at school the kids have been conducting a bio-diversity audit on the school grounds and discussing ways to create habitats for local animals in our yard.

A massive thanks to the Newham District Landcare Group who supported us to get to Queenscliff and participate in the Marine Discovery Centre activities.

Jock, Olivia, Sam and the grade 5-6 kids.



Yet another successful funding application

Our Landcare group has just received a \$50,000 Biodiversity On-ground Action grant from the Victorian Government. This will build on works undertaken by the group, over the last twelve years, to develop the Campaspe-Maribyrnong Headwaters Biolink (known in the Macedon Ranges Planning Scheme as the Cobaw Biolink). Eight landowners will receive funding support for revegetation and fencing to exclude stock from these areas. Gorse control will be undertaken at Twin Bridges Bushland Reserve (on Monument Creek).

The group will purchase more nesting boxes for Brush-tailed Phascogales, a pole camera for monitoring nest boxes and a motion-sensor camera for use by members wishing to record wildlife on their property.

Nest boxes for Phascogales around Newham

In 2014 fifty nest boxes were installed across 7 properties as a component of a large Communities For Nature Grant the landcare group received in 2013.

Nest boxes have a role to play in areas where there has been significant loss of hollow-bearing trees (think most of Victoria!) and trees present in revegetation are way too young to have natural hollows. There are limitations of course – they're not as well insulated as a tree hollow would be, they may be invaded by feral species (bees, birds), they will deteriorate with time and we need to position them where appropriate food sources are available.

In the first round of monitoring we found

- some empty boxes, generally where the ground layer was missing or seriously damaged
- some Sugar Glider nests. These are neat and tidy creations of gum leaves.
- some Phascogale nests. These are messy creations using a range of materials

The boxes are designed for Phascogales, which are a threatened species, but the entry size and box and the right size for Sugar Gliders, which will often occupy them.

The Gliders are territorial and so, if several boxes are placed relatively close to each other, the Gliders in residence will scare off other Gliders, leaving boxes free for Phascogales.



Sugar Glider nest.



Phascogale nest with resident Sugar Glider.

The Rivers of the West – Where does all our water go?

By Alice Aird, Newham

Have you ever thought about where the rain that falls on your place goes? And what happens to it along the way? The recent **Rivers of the West** Community workshops have nudged me into thinking a lot more about water flowing through the Newham region and into the river systems beyond. I feel even more motivated now to know where our water goes after leaving our properties and what it carries with it into the waterways downstream.

The **Rivers of the West** is a new direction for the future management of creeks and rivers in our region, proposing a new umbrella of legal instruments that will align and coordinate the care and custodianship of many groups and individuals. The Act is being considered by the Victorian Parliament with a promise for a new future of the Werribee and Maribyrnong rivers and their tributaries – a vision of clean and sparkling waterways west of Melbourne, dancing with life and light, refreshing and enlivening the communities they flow through – and part of this is starting right here, in our neighbourhood – with the Deep Creek in the Newham district.

I'm not alone in my enthusiasm. As well as NDLG members Karl Kny, Nick Massie and myself, Macedon Ranges was represented at the workshops by five members of FEHMR and the Jackson's Creek Eco-network, and Cr Helen Radhedge. Why are we so pleased with the final proposal for the Victorian parliament to adopt a Rivers of the West Act, along the lines proposed? There are a host of reasons best explored by reading it yourself here <<https://www.envirojustice.org.au/wp-content/uploads/2018/06/EJA-Rivers-of-the-West-Draft-Proposals.pdf>.>

The Rivers of the West Act Proposal has been developed by Environmental Justice Australia. It is important for our landcare group because it:

- Sets a new, powerful and clear way forward for the rivers in our region – proposing changes that will more powerfully address the challenges of biodiversity loss, river system degradation, water quality and the complexity of multi-stakeholder river management.

- Proposes legislation that aims for a long-term vision of connected and restored landscapes, respecting and recognising Aboriginal history and practice, within a new model of urban design.
- Puts forward a vision of all the western waterways, clean and healthy and with a rich biodiversity indigenous species, refreshing and enlivening the communities they flow through, protected by an umbrella of legal instruments that align and coordinate the care and custodianship of many groups and individuals.
- Includes legally binding strategic river planning within a Biolinks Framework.
- Embodies respectful collaboration between diverse people with a common goal for through a truly participatory design process.
- Is a model for an integrative approach to environmental management
- Embodies a sense of the possible, of 'We can do this!'

Environmental Justice Australia is

- o the environment's legal team.
- o use legal expertise and practical understanding of the legal system to protect nature and defend the rights of communities to a healthy environment.
- o a not-for-profit legal practice.
- o lawyers and legal advisers to environment and community groups,
- o providers of strategic and legal advice to support campaigns for positive social change.
- o donor-funded, supporter-driven, independent of government and reliant on the backing of the community.

The Rivers of the West workshops, a series of four community workshops offered by **Environmental Justice Australia**, the organisation leading the Rivers of the West campaign, have been held over May-July as part of designing **a new approach to legal protection for Melbourne's western rivers and waterways**, the largest being the Maribyrnong and Werribee Rivers. EJA is dedicated to **strengthening legal protection for natural systems** in Australia. To learn more about the workshops look here <https://www.envirojustice.org.au/projects/community-workshops/>

Water quality and biodiversity in the Newham District – a show case for the region.

Melbourne University and Melbourne Water presented a map of all the tributaries of the Maribyrnong River at a recent Rivers of the West workshop that was color coded to show their water quality. Some sections of our creeks around here, such as Garden Hut Creek near where Karl and Brigitte live, were coloured the brightest blue of all, indicating the highest water quality measured in the catchments (technically, 25 to 30 or more macroinvertebrate* families have been found there) (Karl Kny, personal communication). Excitingly, this site is now being used as a reference site for how good the water quality could become further downstream.

However, on a more somber note, the test data from the NDLG and Newham PS Waterwatch project shows that water quality in Deep Creek next to Newham School has degraded quite substantially over the past year.

* Macroinvertebrates are organisms that lack a spine and are large enough to be seen with the naked eye. Examples of macroinvertebrates include flatworms, crayfish, snails, clams and insects, such as dragonflies.

What will we do to ensure that the water that leaves Newham, at the source of the Maribyrnong River, is clean and healthy for our aquatic life here, and that we are not sending any nasties downstream?

How can we lift our game and feel proud of the quality of water we are contributing to the Maribyrnong System?

How we can ensure that our rivers and creeks continue to provide habitable environments for the Pygmy Perch and Platypus?

The Newham and District Landcare Group will continue to participate in the consultation for the Rivers of the West – stay tuned for more information or contact Alice at airda@bigpond.com or on 0400 068 551 if you would like to be more involved.

Watch this space... do we have the endangered Yarra Pygmy Perch in our creeks?

Did you know? The Macedon Ranges 2018 Biodiversity Strategy Consultation Summary states: 'Macedon Ranges has been identified as high value for macroinvertebrates, Yarra Pygmy Perch and Platypus by Melbourne Water'.

Melbourne Water is currently testing water samples from Deep Creek in Newham and Lancefield, as well as from Garden Hut Creek, for remnant DNA of the endangered Yarra Pygmy Perch. We are eagerly looking forward to hearing about the results.

Locals monitoring water quality

As part of the Waterwatch Program for Melbourne Water members of NDLG have been routinely monitoring the chemical and macroinvertebrate water quality of our natural waterways. Jenny Waugh and the students from Newham School have been monitoring Deep Creek next to the school for more than twelve years and Brigitte and Karl Kny have been monitoring at six locations on Garden Hut Creek above and below the Lancefield water reservoir.

If you are interested in joining Waterwatch please contact NDLG, Jenny or Karl.



Newham School students with Jenny Waugh testing the creek water.



We are always looking for photos for our newsletters, displays, and most particularly the website which will be revamped. Please contact Penny or Helen.

Newham rainfall report

Nick Massie

Rainfall this calendar year (31 May) totals 266mm. This is the typical total for the end of May with the average of years 2008 – 2017 being 257mm. While March and April totals were low 117mm in May brought the totals to the average. To 18 June 2018 we have had 83mm which maintains the typical trend.

The table below lists the monthly totals since 2008.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2008	25.5	12.5	30.5	18.0	35.0	103.0	53.5	50.5	14.0	6.0	60.5	84.0	493.0
2009	0	7.0	46.5	28.0	52.0	48.5	50.5	101.0	82.5	31.0	86.0	87.0	620.0
2010	23.5	56.0	85.0	47.5	25.0	93.0	85.0	162.5	63.0	163.9	178.4	92.0	1074.8
2011	243.4	142.4	21.6	65.6	64.5	58.3	82.2	50.2	102.6	66.6	77.4	96.2	1071.0
2012	47.6	141.8	77.6	30.6	43.8	115.0	104.4	90.4	42.6	21.4	21.0	25.2	761.4
2013	3.6	122.4	43.2	15.4	85.0	71.0	120.2	116.4	90.2	68.0	41.4	39.6	816.4
2014	18.2	11.2	43.6	70.2	50.6	105.6	33.8	15.6	49.8	34.8	14.6	21.0	469.0
2015	55.2	46.4	16.2	35.8	66.4	32.0	88.6	37.4	39.4	22.4	42.8	34.2	516.8
2016	37.6	5.2	38.8	41.4	106.6	105.6	170.0	92.2	186.0	97.4	54.2	94.6	1029.6
2017	27.0	21.0	28.2	173.2	35.6	7.0	59.6	110.0	55.0	47.0	78.0	70.6	712.2
2018	76.8	8.2	35.4	29.4	117								266.8

The cumulative monthly totals are below.

