AUTUMN 2017
Newsletter No.49

Newham & District Landcare Group

Working towards a healthier environment

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Address – PO Box 314, WOODEND, 3442

Scattered paddock trees

and their many benefits

DIARY OF EVENTS

Despite the lack of speaker evenings so far this year there *have* been things happening around Newham: The Welcome BBQ at Newham Primary in February; Clean Up Australia Day in March; a planting at the new Braemar site in April (NDLG supported this event with logistics advice, supply of plants and training/supervision of planters) and on 14 May a planting at Hanging Rock Reserve.

There *are* some speaker events being organized for winter-spring, and separate advice will be given about these when details are confirmed.

If you have any suggestions for speakers or other events, please let us know. If you would like to make us more organised on the events front (perhaps an annual calendar of events planned in advance, heaven forbid!) we would love to hear from you! In the meantime we will continue to keep you informed of events being held locally that might be of interest.

Group contacts

President: Nick Massie. **Vice President:** Penny Roberts. **Treasurer:** Hilary Roberts.

Committee members: Karl Kny, Doug Dalgleish, Jim Sansom and Luke Spielvogel.

Secretary: Helen Scott.

New members, 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!

Musk Daisy-bush *(Olearia argophylla)*

Photographed at Hanging Rock early this year

The Musk Daisy-bush is a fast growing tall shrub or small tree that prefers rich well-drained moist soils and dappled to full shade. *Flora of Melbourne* gives a size range of 3-10m but in this area, especially on drier or north facing sites, expect it to reach 3-5m.

Given a bit of dappled shade and a southerly aspect it will reward you with masses of large, terminal clusters of creamy flowers in Spring and Summer. The leaves are large, shiny dark green on top and silvery underneath, oval to broadly elliptical in shape, with a musky aroma.

Snowy Daisy-bush (*Olearia lirata*) is a smaller plant, growing to 2-3m in height, with narrower somewhat duller dark green leaves. It also has terminal, creamy white flower-heads and grows in similar conditions – but seems less fussy about the soil it is in.

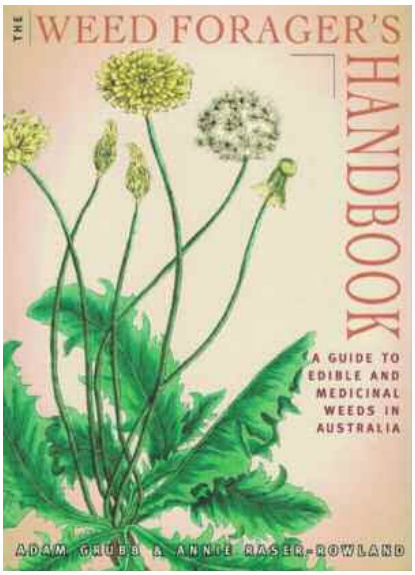
Silky Daisy-bush (*Olearia myrsinoides*) is the 3rd Olearia species that I have observed locally. It is a much smaller plant – growing to 1-1.5m as an open spreading shrub and it prefers well-drained rocky soils and will tolerate extended dry periods once established.

Book Reviews

Book reviews from Aesop's Attic Bookshop, 70 High Street, Kyneton
5422 6059. https://www.facebook.com/aesopsattic

The weed forager's handbook

A guide to edible and medicinal weeds in Australia



By Adam Grubb and Annie Raser Rowland

Hyland House $21.95

A brilliant handbook, small enough to fit in a jacket pocket yet packed with information that will inspire you to add their 'top twenty' to your diet.

The book includes excellent photos as well as coloured sketches, the history of the plants, common and botanical names, and a very detailed description of the plants benefits and nutritional qualities.

Did you know that the Dandelion is the most nutritious vegetable ever tested by the US Department of Agriculture, being particularly high in iron, calcium, vitamins A, B6, E and K, thiamine, antioxidants and both beta- and alpha- carotene?

The book also includes the top 10 rules for the edible weed appreciator, starting with 'Identify your plant beyond a shadow of a doubt', and chapters on recipes and how to deal with weeds in your garden.

I highly recommend this handbook, especially as the authors are Melbourne-based.

Circle

by Jeannie Baker

Walker Books

Another remarkable book by Jeannie Baker.

If you haven't seen her work before you will be amazed to know that all of the art work for her books is created by collage.

Many of Jeannie's books do not have any text however the Circle does have a small amount of text.

Jeannie books all have an environmental aspect to them and are ideal to use in a classroom or Landcare workshop settings. In many cases teacher's notes are on line.

The Circle is about the migration of the Godwit, as the book states "In its lifetime a godwit may fly further than from the Earth to the Moon and back".

As well as the story about the bird we are brought into the world of a young boy who too wishes he could fly.

A wonderful book to be enjoyed both by children and adults, and on many different levels

Can't see the grasslands for the trees:

inappropriate tree planting in native grasslands.

By Jim Radford and Deanna Marshall

Seemingly vacant roadsides and miscellaneous public reserves scattered throughout agricultural landscapes often harbor native grassland remnants. There is sometimes a lack of understanding that these valuable treeless ecosystems are an integral part of the landscape, and inappropriate tree planting can be a major threat to these grassland remnants.

Trees may compete for resources (space, light, water, nutrients) with grassland species, altering species composition and vegetation structure.

Even if tree planting may not significantly damage grassland remnants, site preparation may have major impacts.

Disturbance such as cultivation, deep ripping and weed control results in habitat destruction, damage to the soil crust, weed invasion and soil erosion that can be expensive or even impossible to repair.

The natural distribution of vegetation types, such as 'woodlands', 'treeless plains' and 'drainage lines' are strongly linked to soils and associated parent materials and geomorphic processes. These patterns are not random. Revegetation projects should aim to match species with these natural patterns.

Altering the vegetation structure can also have unintended consequences for fauna. For example, Plains-wanderers will not inhabit grassland areas close to trees because of the threat from birds of prey that use trees as perch sites.

Mea culpa and my poor nature strip ramblings

By Penny Roberts

As a landowner I have been guilty of inappropriate planting.

Environmental weeds? Yes: certain Wattles and more than a few exotics in my 'play' garden.

Too many trees, eager for a 'quick result'? Yes, and yes.

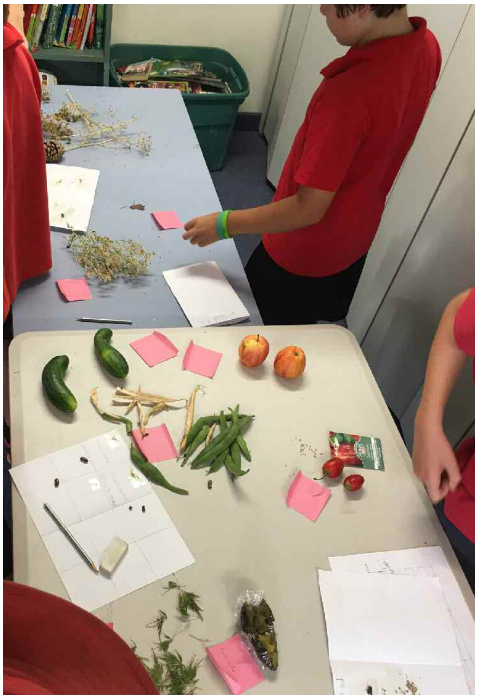
Fortunately for us the areas we planted were almost completely lacking a native ground layer. Parts of our property have historically been considered prime agricultural land and so were improved for that purpose – fertilized, ploughed and sown to imported grasses or potatoes – but the 'certain wattles' planted adjacent to Dons Road are seeding into the road reserve. Despite its pasture-grassy look it still contains many wildflowers, including the Federally listed, threatened Matted Flax Lily.

So, before you plant look closely at what is already growing there. Improved pasture grasses or threatened plant community? Individual threatened species?

The sloping rocky sections were not treated this way and it gives me great pleasure to see these areas recovering their native ground layer now that stock has been excluded. Each year over the past decade 'new' species have been recorded on our section of the Jim – mostly wildflowers and native grass species – and the larger species that survived intensive use are regenerating where stock has been excluded.

It is SO much more effective to protect remnant and allow it to recover than try to recreate what was there prior to intensive farming use. The complexity of intact remnant vegetation is amazing and it is this which is so difficult to reproduce. An offset created in land that has been used for agricultural purposes will never provide as many ecological services as the remnant it replaces!

The Need for Seeds



by Cody and Elisha

This term we were lucky enough to have a special Kitchen Garden session hosted by Mr. Harrison.

We learnt how seeds are dispersed and spread around the world. Seeds disperse so that the type of plant can keep growing in other places.

Plants can use water, wind, self and animal dispersal for their seeds. We found lots of different seeds from around the schoolyard and looked to see how they might disperse in nature.

One of the most interesting types were the carrot seeds which looked like little burrs which can get stuck on an animals fur. The animal then walks the seeds to another part of the paddock before they may scratch them off. This is how carrots spread.

We saw that fruits have seeds inside them. The delicious fruit means that the seed is digested by an animal and 'dropped' in another location after passing through the stomach.

We had loads of fun and learnt a lot, thanks Mr Harrison and Carol. A big thanks to theNewham & District Landcare Group who funded this fun and educational event for us.

It is a delight to see the growing awareness of students at the local primary school as evidenced in the writing of Elisha and Cody.

N&DLG has supported Newham Primary in many ways for many years and it will always be a strong focus of the group to provide support and funding for environmental activities at the school. This takes multiple forms, some of which you will be familiar with through articles in past newsletters – Waterwatch / science activities led by Jim and Jenny, funding for specialist teaching sessions (excursions and incursions), the welcome BBQ for new families at the school, propagating group fund-raising for landscaping of the grounds – but others you may not be aware of. For example, Landcare accessed Government $$ for clearing of woody weeds in the creek zone (imagine 3m high Blackberry along with Broom and Thistles…) and subsequent revegetation and since then has funded annual follow-up weed control. As this area has matured, its value as a resource for environmental activities at the school has increased. Installation of the bird-hide enabled bird watching as an extension of camp activities.

Landcare is committed to ongoing funding for environmental activities and development of the bush areas within the school (including nesting boxes). This remains possible because of the contributions of Landcare volunteers that give us an income stream. A big thank you to all who assist in Landcare activities!

Newham Primary School:

New parents welcomed to a BBQ and information session

What a crowd – a free feed and an information session about the school, parents group and landcare activities pulled in the crowds at Newham Primary on 23 February. The BBQ was under the control of Hilary Roberts whose magnificent cooking ensured a great queue of children and parents and, very quickly, a 'sold out' sign!

The weather was kind to all, with a warm night, and there was plenty of opportunity to "network".

The number of attendees exceeded 120, however some people bypassed the information session at the school to beat the crowd to the Landcare BBQ!

Some changes may be made to streamline the food delivery, but Newham Landcare support for this annual event will be ongoing.

Brigitte's Wildlife Blog

Being a devoted Landcare person is definitely not easy: picking the right seedlings to plant at the right spot at the right time and nursing it through icy winters and drought stricken summers can be disheartening at the best of times. And very often, just when the little fella starts popping its tender little leaves above the plastic protection – up comes this blasted wallaby or a triple cursed cockie and snips the little sapling either in half or pulls the whole plantlet out of the soil. Oh Karl and I know that scenario too well !

Many many years ago when we purchased our contour-ploughed and pasture improved property his and my passion started to divert slightly: Karl started re-vegetating the land and I started to look after native wildlife. And yes, I raised countless plant destructors that nipped and snipped and ate vigorously his new plantings. Needless to say Karl was not amused but I always managed to placate him by pointing out that the culprit was probably Sophie.

Little Sophie, a tiny naked swamp wallaby came into my, sorry OUR care after her mum got killed by a car. She was a superstar right from the beginning and I named her after a childhood idol of mine Sophia Loren.

Sophie was quite a character – mind you, ALL wallies are. Plus an incredible first-class high-jumper. Leaping up from the floor onto the dinner table was no problem at all for the little imp. And to mark and show-off where she had been she quite often left us some little souvenirs.

One day I tried to send a fax and the machine jammed. Several attempts later I started to dismantle the stupid bit of equipment – only to find quite a few squashed wally droppings deep within the paper in-feeder.

And another time Karl found several wallaby pellets on the keyboard of his laptop. Sure that was funny and we laughed a bit. What we did not realise though was that Sophie also had done half a litre of wee-wee into the keyboard as well. And consequently the urine dried, became rather smelly and did something deep within the electronics of modern technology – it made the letter "c" very sticky.

At that time he had business dealings with a company whose name contained three "ccc's" And whenever he typed that company's name the "c" just got stuck and typed ccccccccccccc. I found it REALLY funny and would have loved to be at the IT department when he took his laptop there to be fixed and tried to explain the smell and the sticky letter "ccccccccccccc".

Sophie is very ancient now and her face is nearly totally grey. But over the years she has been busy making sure that there is a healthy wallaby population in our area. And maybe some of Sophie's grandkids have made it to your place to nip and snip at your little plantings.

My suggestion is to do what we did: purchase new plastic rolls and cut them high enough that Sophie's grandkids can't put their snozzle in! *And* also purchase bigger and sturdier wire to put around! *And* metal pegs to hold it all in place!

Scattered paddock trees

Large old trees, scattered across paddocks in rural landscapes, are a common sight and widely appreciated for their aesthetic appeal. They have long been recognized for the economic benefits of providing shade and shelter to livestock, lowering the risk of dryland salinity and reducing erosion. More recent research has confirmed their importance for wildlife and conservation of biodiversity.

Many of these trees are simply dying of old age – most of the existing mature trees are old and little regeneration is occurring. The extent and severity of tree decline has reached historically high levels in the past few decades and some estimates predict that in 40 years all the paddock trees could be gone.

These old trees are an important part of the landscape and play a number of roles on a healthy and productive farm. Paddock trees being generally large and old provide hollows for nesting and more nectar than younger trees. Fallen leaf litter provides habitat for lizards, frogs, mammals and birds. Bats are a major user of paddock trees and play an important role in controlling agricultural pests – especially in landscapes with isolated vegetation and less bird activity

Benefits for your farm

- Pest control
  Bats and birds that roost in trees can significantly reduce the number of insect pests.
- Stock and crops thrive better with shelter
  Trees give protection from the wind and extreme temperatures.
- Salinity management
  Trees can improve waterlogging and dryland salinity problems.
- Improved soil structure
  Wind and water erosion is reduced with remnant vegetation.
- Better quality soil
  Soil fertility improves as leaf litter and animal droppings break down, returning nutrients to deep soil beyond the reach of the pasture root zone.
- Natural regeneration
  Mature trees provide the seeds to grow young trees and create the right conditions to grow native grasses and shrubs.
- Bee products
  Valuable for apiary, honey, bees wax and pollination, although feral bees can exclude native fauna from tree hollows.

Benefits for our wildlife

- Provide habitat hollows– for many birds, mammals, such as micro bats, reptiles, frogs, insects and spiders.
- A stepping stone– for animal movement between patches of native vegetation.
- Important fauna food sources– like nectar, foliage and insects.

Even dead and unhealthy scattered paddock trees are important as they provide homes and shelter for wildlife.

The big concern is that in 40 years all of these paddock trees could be gone.

About tree hollows

Scattered paddock trees are important because they often contain hollows or are of hollow forming age.

Since it takes at least 60 to 80 years for hollows to develop, we need to conserve mature trees to ensure the survival of animals and plants that depend on them, until replacements have grown.

Planted trees do not replace the established trees until they have formed the full range of tree hollows, cracks and loose bark needed for wildlife. If we keep our scattered paddock trees in good condition, we can pass on a valuable natural resource to the next generation of land holders.

Eucalypts are the most important trees in the catchment when it comes to providing homes and food for a range of animals. *But not all eucalypts are equal*. The size, age and type of tree can make a big difference to the shelter available for animals. For example: Non-eucalypts are also important because they contain small tree hollows and bark that create shelter for smaller animals.

Food and nesting sites for wildlife

Flowering: Honeyeaters, sugar gliders and many other animals depend on nectar and pollen. Some birds follow the flowering trees as they blossom. Not all eucalypt trees flower at the same time, so the birds need to have a variety of tree types across the landscape to get nectar throughout the year.

Leaves: Leaf eating animals like koalas, possums and gliders need a range of trees to choose from because not every tree has good food. For example, some gum leaves cannot be eaten because they are too toxic and not as nutritious as the leaves found on other trees.

Insects, spiders and other invertebrates: Large 'habitat' trees are a haven for invertebrates such as insects and spiders. Many birds and reptiles collect food from under the bark, on leaves, around flowers and amongst the debris that falls under the trees.

Nest sites: Even small trees can be the home for nests of large birds such as wedge-tailed eagles.

What is happening to our habitat and paddock trees?

Even in big patches of native vegetation the number of large trees (or habitat trees) has been reduced to one tenth of the original density.

These large habitat trees are disappearing because of:

- Old age
  Many large trees are probably at the end of their lifespan and there are no replacement trees. This is happening more quickly as a result of routine agricultural practices.

- **Insect damage**
  Stressed trees are in more danger of being attacked by Christmas beetles, leaf miners, sawfly larvae, lerps and scale insects.
- **Mistletoe infestation**
  Stressed trees are at more risk of heavy infestation by mistletoe.
- **Wildfire**
  Hollows make established trees more susceptible to being burnt out as flames can funnel up the internal hollows and still be burning sometimes weeks later.
- **Stubble and log litter burning**
  This frequently leads to the death of paddock trees.
- **Clearing**
  Paddock trees are still being removed for fence replacement and access for wider machinery.
- **Cultivation**
  Surface roots are damaged if cultivation takes place too close to the tree. This can make it difficult for the tree to get enough water and nutrients and increases the chance of fungus and insect attack.
- **Pasture improvement, fertilizers and herbicides**
  Dominance of exotic pasture grasses (like phalaris) affects the tree's chances of survival. Some exotic grasses can take the tree's moisture and inhibit the seedling regrowth.
  Fertilizers change soil nutrient levels. Knockdown herbicides and non-lethal levels of herbicide from drift can slowly kill mature trees.
- **Stock**
  The loss of ground cover from stock causes soil compaction and degradation, erosion and a change in soil fertility from the buildup of manure. Stock can also ringbark rough-barked trees such as stringybark, peppermint and box trees as well as kill seedlings.

How can we protect them?

Some ways to protect scattered paddock trees and limit dieback are:

- **Fencing**– to protect selected trees from stock and routine agricultural practices in the paddock. Enclose an area twice the size of the canopy, to encourage regeneration and allow a layer of natural mulch and debri to build up around the base of the tree.
- **Plant additional shade trees**– away from isolated paddock trees.
- **wrap wire netting** around trees that are being ringbarked by stock
- **do not apply fertilizer** in the root zone of the tree
- **reduce herbicide spray** drift as much as possible
- **don't burn** logs, stumps, or fallen branches around the base of trees – if they are in an inconvenient place, move logs to a more appropriate remnant vegetation area or creek as wildlife habitat.

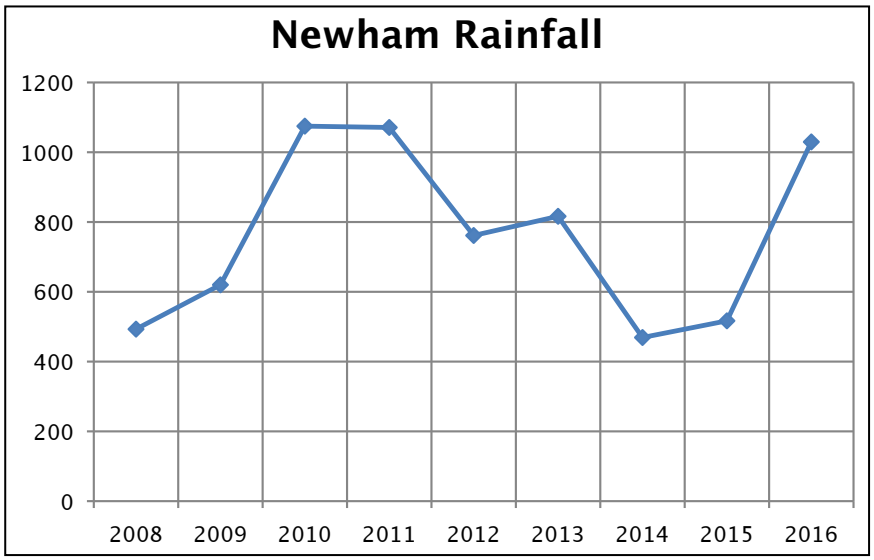
Let us see these old giants retained in the landscape, valued for their many benefits.
Do *you* have an isolated tree that could be protected in order to enhance the beneficial functions it performs?

Newham rainfall report

Total rainfall for calendar year 2016 was 1,029mm which was the second wettest year since 2008 (when my records begin) only exceeded by 2010. 2017 started off dry with low totals in January, February and March all being below the average for those months. However April has gone out with a deluge with a total of 173mm. This is more than three times the average and takes the total to 249mm for the period. This on a cumulative basis makes 2017 to the third wettest start to the year since 2008.

Nick Massie

	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									249.4



Graph left, shows the yearly totals and highlights how wet 2016 was in comparison to the previous five years.

This graph shows cumulative totals that highlight the big jump in April.