

**SPRING 2018**  
Newsletter No.54



Production of this newsletter is funded through  
Melbourne Water's Community Grants Scheme

# *Newham & District Landcare Group*



Working towards a  
healthier environment

Address – PO Box 314, WOODEND, 3442

## **Get to know our spring flowers –**

*recognise these  
local species?*

*Page 3 competition.*

*Wildflower photos by Helen Scott*

# DIARY OF EVENTS

## NOVEMBER

**Friday 16**

**Working bee at Newham Primary School, 4–6pm**

Maintenance in the native vegetation area adjacent to the creek – much needed! The school has scheduled a whole school working bee for general maintenance and work on the frog pond that was started recently. NDLG is funding Sam Harrison to run activities for children during this session.

## DECEMBER

**Saturday 1  
Christmas BBQ**

End-of-year celebration at Wesley Park from 6pm. Expect fantastic food and all the usual fun. GF BBQ items provided by Landcare. Bring something savoury or sweet for the shared table BYO drinks/chair/picnic rug/plates and cutlery etc/an egg for the toss.

RSVP: to penroberts@bigpond.com (numbers, special dietary requirements) by 28 November.

## FEBRUARY

**Friday 22**

**Rivers of Gold project: Understanding how mining has shaped Victoria's rivers.**

Newham Hall 7 for 7.30pm.

Dr Susan Lawrence (La Trobe University) takes a fascinating look at the changes gold mining brought to the rivers of central Victoria and the resulting conflict between miners and farmers.

**N&DLG members have year round access, via the Propagating Group, to a selection of locally grown plants, that perform well in our area.**

## Group contacts

**President:** – pending. **Vice President:** Howard Stirling. **Treasurer:** Hilary Roberts.

**Committee members:** Doug Dalglish, Penny Roberts, Jim Sansom.

**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 pest Coordinator:** Sue Barker; 5427 0805.

**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:** <https://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!

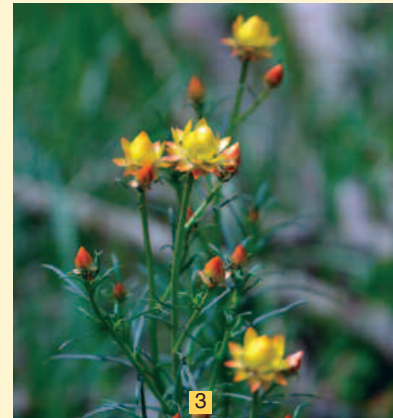


# Spring wildflowers competition

Ian and Helen Scott took a walk along Sheltons Road in mid-October to see which wildflowers were out and took these photos. Early days yet, and the season will continue to provide a colorful backdrop to our locality. **The first person to send the correct botanical species names of these shown below, wins a bottle of wine!** Email your list to Helen at [orseda@bigpond.com](mailto:orseda@bigpond.com).

Sheltons Road is one of the best quality roadsides in terms of remnant vegetation in Newham Landcare's area. Members of the "Weedies" (Roadside Management Group) spend a lot of time controlling weeds along its length, and have another session in November. We work with the Shire to improve management practices on many local roadsides, for example to do with drainage, verges, weed management, tree lopping... and encourage landholders to value and protect them.

How fantastic it would be to see many more of our roadsides like this, not just for the beauty of "tiny wildernesses", but for the invaluable biolink connectivity they provide.



# Landscape connectivity: science and practice

*Penny Roberts reports*

Dr Jim Radford, Principal Research Fellow at the research Centre for Future Landscapes, School of Life Sciences, La Trobe University, returned to Newham in early September to bring us up to date on the science and practice of landscape connectivity. The text of his presentation slides will be reproduced in three parts over as many newsletters [with additional notes by me in blue font](#). Hopefully the content will provoke discussion between members and neighbours and facilitate the development of an effective Cobaw Biolink.



1. Benefits of native vegetation
2. Guiding principles for landscape restoration
3. Priorities and guidelines to improve landscape connectivity

## Benefits of Native Vegetation

**1. Habitat for wildlife** [Habitat is vital if we are to prevent further species extinctions.](#)

[Quantity and quality are both important – meaning the area of native vegetation as a percentage of total area and the presence of a range of habitat values \(such as diverse species of flora, tree hollows, large woody debris, ground 'litter', rocky outcrops etc\)](#)

Key research findings:

- increasing the % tree cover of a given area from none to 30% significantly increases the number of bird species present.
- the number of bird species in woodland increases as the area increases.

## 2. Increased connectivity

Connectivity is essential for survival of many species – to allow them to move safely through the landscape in response to specific threats (e.g. fire, habitat destruction or fragmentation due to human pressures, climate change). This is separate and in addition to the need for habitat areas of a size large enough to sustain a population of any species.

## 3. Aesthetic/cultural/spiritual

[Isn't this why so many of us have moved to the country?](#)

## 4. Well-being and personal health

[These benefits are now being qualified and quantified, given a monetary value – scope for another article!](#)

## 5. Ecosystem services

### Provisioning Services

Products obtained from ecosystems

- Food
- Fresh water
- Fuel / wood
- Fibre
- Biochemicals
- Genetic resources

### Regulating Services

Benefits obtained from regulation of ecosystem processes

- Climate regulation
- Disease regulation
- Water regulation
- Water purification
  - Pollination

### Cultural Services

Nonmaterial benefits obtained from ecosystems

- Spiritual and religious
- Recreation and ecotourism
  - Aesthetic
  - Inspirational
  - Educational
- Sense of place
- Cultural heritage

### Supporting services

for the production of all other ecosystem services

- Soil formation
- Nutrient cycling
- Primary production



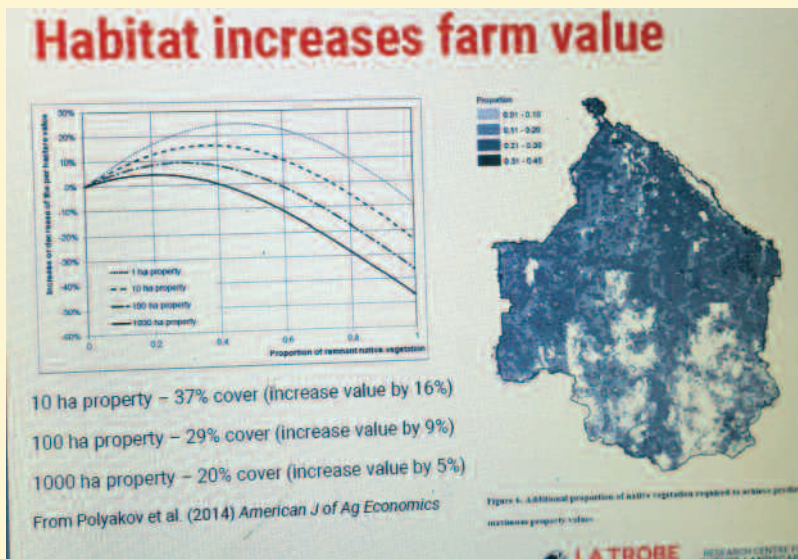
## Regulating services provided by wildlife

- **Pollination** (insectariums, native vegetation)
  - by wasps, bees, birds
- **Pest control** – by and of invertebrates and vertebrates
- **Consumption of waste products**
- **Nutrient cycling and decomposition**
  - by invertebrates, dung beetles, worms
- **Seed dispersal** – by birds, ants, rodents
- **Fungi spore dispersal** – by digging mammals
- **Disease control**

~US \$7billion services provided annually by insects for dung burial, pollination and pest control in the US (Losey & Vaughan 2006)



## 6. Property value



## 7. Increased agricultural productivity

### Ecosystem services used by farmers

Practice	Production gain / ecosystem service
Shelterbelt	Wind reduction – crop yield gain
Shelterbelt	Temperature regulation – increase in wool production, live weight gain and lamb survival for sheep; live weight gain and milk production in cattle
Shelterbelts	Intercept spray-drift and nutrient run-off
Native vegetation/shelterbelts/insectariums	Pollination and biological control (birds / predatory insects)
Scattered paddock trees	Biological control – bats, birds, insects
Dung beetles	Waste disposal / decomposition
Low/zero fungicide/insecticides	Soil biota – nutrient cycling, C sequestration
Nesting sites for raptors	Carrion disposal
Wetland reclamation and restoration	Pest control (ibis, ducks, geese)

**NATURE IS GOOD FOR YOU!**

# Bringing Back the Brolga: Swamp Restoration in the Southern Grampians



At NDLG's AGM on August 17 our guest speaker was Mark Bachmann, Manager of the Nature Glenelg Trust. Nature Glenelg Trust (NGT) has been working to restore habitats across a broad geographic area of south-eastern Australia since the launch of the organisation in January 2012.

Mark spoke of the Trust's work as a not-for-profit community organisation in bringing investment into the region to restore previously drained wetlands on both public and private land. "Not only is returning water to drained swamps good for the environment (in bringing back fish, frogs and waterbirds), but they also make great places for people to enjoy, as anyone who has been bird watching, wading, kayaking or canoeing will tell you!"

He described the Walker Swamp Restoration Reserve project, which thanks to partnerships with the Glenelg Hopkins CMA and the Hamilton Field Naturalists Club, grant funding support from the Victorian Government, and the generosity of the wider community, is now up and running to restore over 1000 acres of the Wannon River floodplain across the Stage 1 and Stage 2 project areas.

Walker Swamp is situated in the southern Grampians region, a short drive from the picturesque town of Dunkeld, in the floodplain of the Wannon River. However the wetland was drained decades ago in an attempt to open up the floodplain for agricultural land use, and more recently plantation forestry, which has left the site in a modified state, with loss of habitat for many species of threatened wildlife.

Earlier, local interest in restoring Gooseneck Swamp and Brady Swamp has been maintained by landholders and the local community since the land was purchased by the government in the 1980s. In 2013 the Trust began working towards a staged process of restoration starting with a proposal to construct a low cost and low risk trial sandbag weir structure in the Gooseneck Swamp artificial outlet drain. The success of the first trial in 2013

led to the construction of a further two trial structures on private land in 2014, at Brady Swamp (March 2014) and Walker Swamp – as in photo left.



*Staff and volunteers after completing construction of the sandbag weir they are standing on. Walker Swamp, Grampians, August 2014.*



Over the 2014/15 summer, after 25 years of uncertainty, the drain cuttings from both Gooseneck and Brady Swamp were entirely backfilled by NGT, reinstating not only the natural banks of these wetlands, but also permanently restoring wetland sill elevations (water retention heights) and the natural flowpath of the Wannon River for the first time since the 1950s.

That process eventually resulted in a new partnership between Nature Glenelg Trust, the Glenelg Hopkins CMA and the Hamilton Field Naturalists Club enabled NGT in 2018 to secure 200 hectares (500 acres) of the property (Stage 1) surrounding the drained and isolated Walker Swamp Lake Reserve (Parks Victoria managed crown land). During negotiations, NGT was also able to seize the rare opportunity to secure the rest of the Walker Swamp floodplain under contract – a further 200 hectares (500 acres) – with this Stage 2 area due to settle later in 2018, providing permanent protection, as a private,



*Brolga at Scale Swamp in August 2018 – just one of the species the Trust hopes to benefit through restoring the wetlands at Walker Swamp. Photo by Lachlan Farrington.*

covenanted nature reserve. This will enable full restoration of the presently drained floodplain to occur and physically connect the Stage 1 area with the now restored wetlands in the Grampians National Park. To enable NGT to proceed with the project and not have to carry a debt on the initial land purchase costs, a fundraising campaign has been underway since June 2018, and by September almost 2/3 of the final \$150,000 funding

shortfall has successfully been raised through public donations.



*Walker Swamp and surrounds July 2018 – beginning to fill.*

Establishment works dealing with the legacy of the previous land use, including new fencing of unfenced sections, blue gum spraying and/or removal, initial mapping tasks and site planning have been completed. On-ground restoration works, planning and community engagement including blue-gum furrow removal in wetland beds, additional fencing repair, cultural engagement with traditional owners, community engagement via citizen science, and preparation of a draft management plan are underway. Hydrological restoration assessment and planning has started, along with permits and approvals to enable the options for the reversal of artificial drainage to be assessed and designed, and permits for the preferred option prior to major



*Looking across Walker Swamp (just starting to fill from local rainfall) to Mt Abrupt, June 2018. Photo by Greg Kerr.*



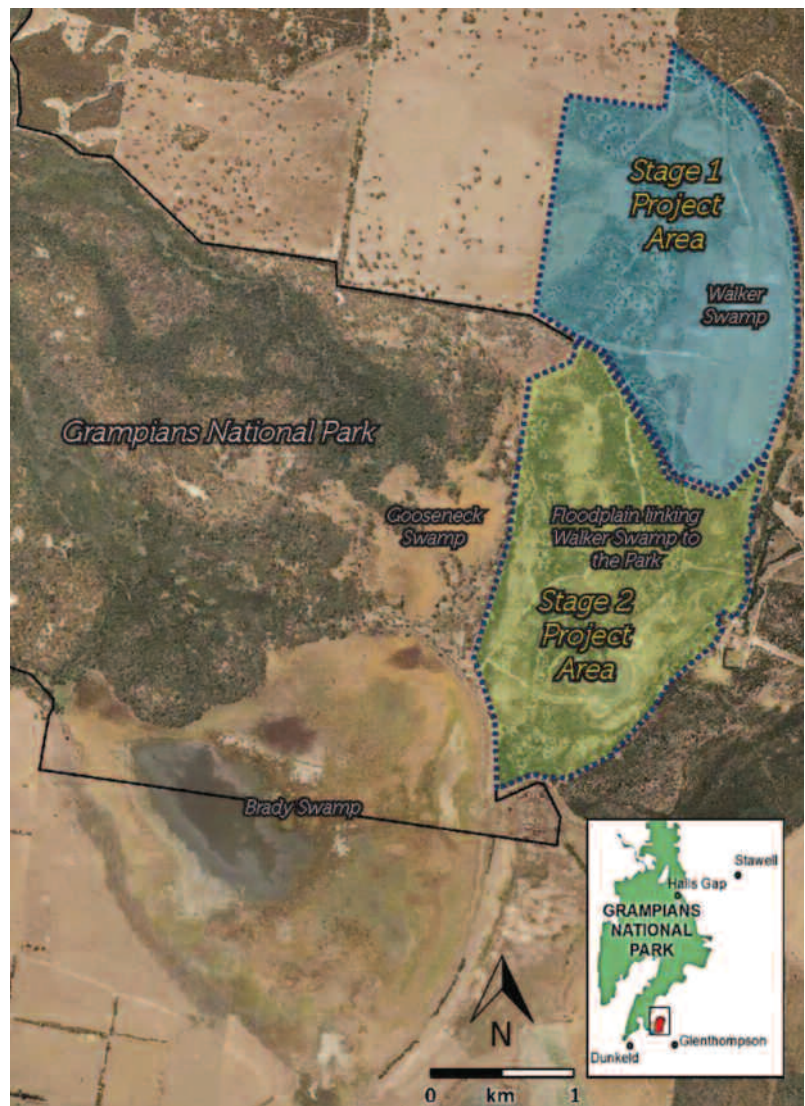
earthworks occurring in autumn 2019. Implementation of earthworks is planned to reverse artificial drainage on the property across 26 km of drains, restore natural floodplain processes and monitor eco-hydrological response to the works. Monitoring will commence in 2018 and continue throughout, while all major works will take place in autumn 2019.

Mark says “A major ongoing focus for us is meaningfully engaging the community in the project, turning the site into a local educational resource, a drawcard for visitors and researchers interested in floodplain restoration and sustainable catchment management, and creating a major, lasting ecological asset that is appreciated and becomes a source of local community pride.”

Mark was a most engaging speaker and we hope to have him back next year to talk about birds and animals from the many projects underway at the Trust.

To learn more or to donate to meet the funding shortfall for the project, or support the Trust’s restoration work, see their website at [www.ngt.org.au](http://www.ngt.org.au).

**Helen Scott.**



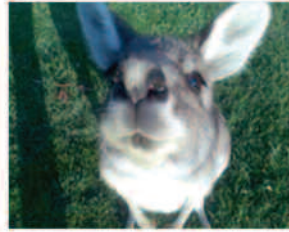
*The project expansion will enable full restoration of the Walker Swamp floodplain and to physically link the entire project area with the Wannon River and the Grampians National Park.*



*Donated tower to be set up as a permanent bird-watching station at Walker Swamp for visitor use and associated educational programs. Photo by Rod Bird.*



## Brigitte's Wildlife Blog



When people hear the words '*native wildlife*' – most of them associate that with kangaroos, echidnas, wombats and koalas. So did I – until I attended a Melbourne Water "Waterwatch" course of how to monitor the health of our Garden Hut Creek. (Did you know that Newham's Garden Hut Creek and Deep Creek are the headwaters of our mighty Maribyrnong River?).

Admittedly in the beginning most of the lectures and slides were pretty boring to me: turbidity, dissolved oxygen, nitrate and all that stuff. But then came a session where we were told of all the little critters living in our waterways: *WILDLIFE !!!!* My ears pricked up, I paid absolute attention – and have been hooked on monitoring and taking stock of all the little animals in our creek ever since then.

That was 5 years ago and our little Garden Hut Creek has put Newham on the map. Not only with healthy though fluctuating turbidity and phosphate levels etc – but with an enormous variety of macro-invertebrates and even native fish like Southern Pygmy Perch and Galaxias. Plus unfortunately also an introduced species of fish, *Gambusia*, also known as mosquito fish. Totally wrong name if you ask me as their diet does not necessarily include mosquito larvae.

By the way and I am totally side-tracking here – Melbourne Water did some of this high-tech DNA testing of our creek to find evidence of the endangered Yarra Pygmy Perch which has been found in Deep Creek. I have not heard of any results yet. Will keep you informed.

Now if you imagine this underwater scenario on land – it would be like having the landscape literally covered with hundreds of different native animals amongst a healthy and fully functioning environment. A Landcare and Wildlife Carer's absolute dream.

Early October 2018 Melbourne Water, Landcare, the Australian Government plus lots of other local community partners organised a national Waterbug Blitz, a nationwide Australia's first waterway monitoring event for 'citizen scientists' to investigate how healthy their local waterways and wetlands are by exploring and identifying what waterbugs they contain.

And yes – Newham's Garden Hut Creek hosted the first of Victoria's events together with renowned macroinvertebrate expert John Gooderham, as well as Melbourne Water specialists and volunteers.

As there are 6 monitoring points at our place along a substantial stretch of the creek, John and I decided it would be best if we do a lot of net sampling early that day to capture as many as possible underwater critters as possible to identify at the day-long event. Now "*macro invertebrate sampling with a fine net*" actually involves splashing either in waders IN the creek or with gumbies from the bank. But whatever technique you choose – you get a bit wet somehow. And that Thursday morning we had 3 degrees at 6 am !!! It was soooo very cold.

The rest of the day was filled with identifying all those critters (and adding even more to my already proud numbers of 80-odd families/genres/whatever) and teaching some of the participants how to do the sampling with a net. (It peeved me though a bit that they had sunshine and 21 degrees after our freezing morning).

I believe the 'wildlife' in Garden Hut Creek did not disappoint and showed off some fascinating results for this national survey of our waterways. And there is certainly interest in further events to sample and identify in the future by all those that attended.



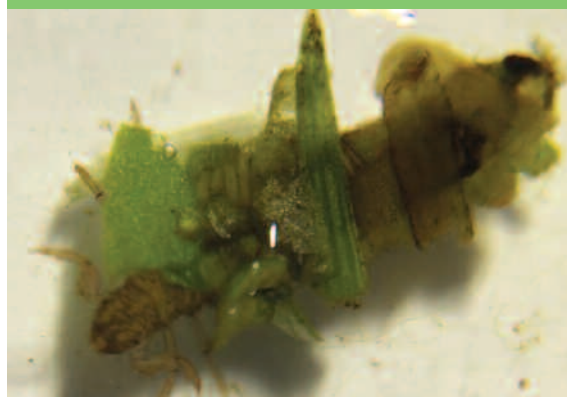
6.45am and balmy 5 degrees. John is fascinated by his find.



What bug is that? We are totally concentrating.



One of the many stone flies 'hatching/emerging' out of the trays during the survey.



A log cabin caddis fly. Pretty unusual and untidy casing.



Southern Pygmy Perch – *Nannoperca australis*.



Water mite – Acarina.

To find out more how to get involved go to  
Waterbug Blitz website <https://www.waterbugblitz.org.au/>  
Waterwatch website <http://www.vic.waterwatch.org.au/>





# Birds on Farms

by Karl Kny

Thirty years ago when we bought our property on Garden Hut Creek it was degraded pasture with lots of weeds and rabbits, with cattle trashing the banks of the creek, and with a few patches of native trees suffering die back.

Since then we have planted thousands of trees, shrubs and understorey and maintained pasture areas with the objective of “half for humanity, half for the rest of life”. It has been great to watch our property evolve and see the native animals return.

As we watch the changes and continue to add bits to our “organic canvas” we thought it would be great if we could somehow measure how the biodiversity has changed.

When we saw the request for expressions of interest to join the *Birds on Farms* program run by Birdlife Australia we quickly joined up. It is a great program to measure the changes in bird populations on farms over time. With *Birdlife Australia* we set up 5 survey areas each of 2 ha size – all different: remnant woodland, newly planted, regrowth, grassland, and creek line areas. These are being surveyed for 20 minutes every 3 months to see the changes over the seasons as well as over the years. Birdlife Australia organized an experienced bird watcher to joins us for the surveys and we have become good friends.

It has been great to learn how to observe and identify birds and we have a list now of nearly 100 bird species that have been seen on our farm. The list keeps growing and the sightings are different each time. Last time we spotted an owlet nightjar nesting in one of our bird boxes. How exciting!

We can heartily recommend getting involved. It is so much fun.

More information at <http://www.birdlife.org.au/projects/woodland-birds-for-biodiversity/birds-on-farms-wl>

# NEWHAM LANDCARE – WHERE TO?

Two recent meetings of the Newham & District Landcare Group have enabled the committee to plan for the future. The aim was to get an idea of the issues that concerned the membership at large.

The first of these meetings was a presentation on climate change by Professor David Karoly in August 2016 (a copy is on the website).

In the second meeting, in April this year, organised by Jim Sansom, pupils from the Newham Primary School initiated discussion by reminding us of some of the key ideas of Landcare. For example: biodiversity, preservation of habitat, the value of healthy riparian zones and ridge-lines, etc.

Members submitted some 80 written responses after Professor Karoly's talk and there were over 120 ideas from our April meeting, gathered from the audience divided into groups.

From an analysis of all this information **thirteen themes** emerged.

- 1 **Working-bees** and hands-on group activities.
- 2 **More specialised group activities** such as plant propagation or establishing demonstration sites.
- 3 **Education**, creating awareness. (e.g. at school, information evenings and talks as well as preparation and distribution of a kit for newcomers about the values and responsibilities of country life). One clear idea was the scientifically established value of having 20% to 30% of a rural property covered in native vegetation.
- 4 Creation of a **map or plan** in sufficient detail to identify ridge-lines and riparian zones for special development as habitat corridors and biolinks. This could become the reference for long term planning.
- 5 **Encouragement, enticement and mentoring of landholders** so that as far as possible 100% of the country-side participates in a broad, sustainable landscape as mapped in (4) above. Recognition that a real benefit accrues when all properties are involved.
- 6 **Sustainability**, self-sufficiency, 'off-grid'. The concept of 'local community' – such things as 'farmers markets'.
- 7 **Rubbish**, clean-ups. Pressure for the reduction of waste in the first place. Waste stream management; reduced need for burn-offs by promoting such things as large-scale composting and making biochar. (Perhaps Council based at transfer stations).
- 8 Linking with **like-minded groups** to create greater awareness in the broader public. (Lions, Rotary, CFA, Macedon Ranges Sustainability Group, Upper Deep Creek Landcare Network and of course the Council)
- 9 **Land-use planning**, urban and rural. Linked to ideas in (4) above.
- 10 **Renewable energy**. Promote building in timber; micro-grid technology; community battery facility; value of solar hot water and PV cells.
- 11 Promote **low consumption lifestyle**. (minimise car use, eat local produce, bike tracks, "reduce, recycle, re-use, repair" etc.).
- 12 **Political** involvement, activism. Note, this is implied in many of the above themes.
- 13 Awareness that a bigger **population** means more resource use.

The Committee is now working to hammer these ideas into our future program.

(Prepared by Jim Sansom with input from Ian Scott)





# Newham rainfall report

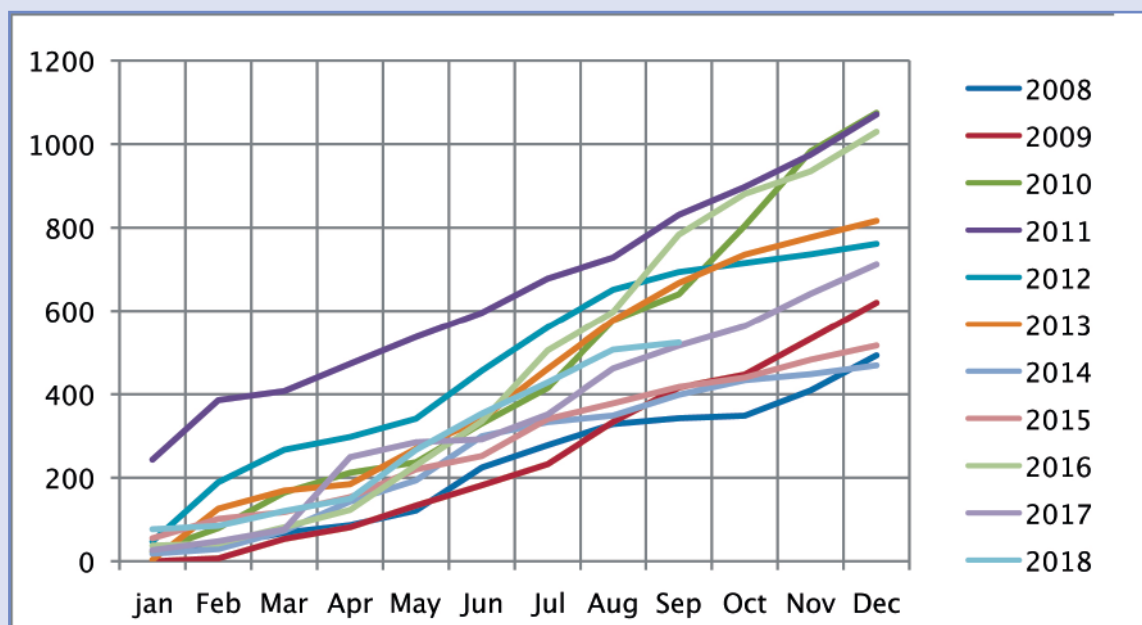
**Nick Massie**

Rainfall this calendar year (30th September) totals 524.2mm. This is lower by 47mm than the average for the end of September with the average of years 2008 – 2017 being 571mm. Notable was the low rainfall in September of 17mm, just higher than the 14mm in the 2008 drought year. To 17 October we have had 50mm which is average for the month.

The table below lists the monthly totals since 2008.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2008</b>	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
<b>2009</b>	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
<b>2010</b>	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
<b>2011</b>	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
<b>2012</b>	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
<b>2013</b>	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
<b>2014</b>	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
<b>2015</b>	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
<b>2016</b>	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
<b>2017</b>	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
<b>2018</b>	76.8	8.2	35.4	29.4	117	86.8	74.8	78.4	17.4				524.2

The cumulative monthly totals are below.



*How do we protect ourselves from bushfire and still protect the plants and animals that make our area so special?*


# Living with Fire and Biodiversity

7:30 pm | Wednesday 14<sup>th</sup> November  
Woodend Neighbourhood House

Owen Gooding, CFA Vegetation Team Leader,  
on how to manage your property to reduce  
the risk of fire and to retain vegetation.

Fire Behaviour and House Blocks  
Landscaping for Bushfire  
Creating a Fire Protection Zone System

RSVP to [woodendlandcare@gmail.com](mailto:woodendlandcare@gmail.com)



## Kitchen Garden Special Lesson

On the 31st of August, Mr Harrison and Carol gave us an awesome lesson, despite the cold wet weather. We learned about the propagation of plants and how some plants can use their stems, leaves and roots to create new plants.

First we went out to the carpark and checked on the rosemary out near the big stone. We checked for natural layering, which is where a plant lays on the ground and sprouts new plants along the ground if the roots go deep enough into the dirt. Then we checked for twigs on rosemary that were close to the ground to be layered. We each found a branch in our kitchen garden groups and dug a small hole for our little plant. Then we got a piece of metal and bent it so it would go over the twig in an arch. After, we covered half of the stalk with dry leaves but left some so the sunlight can get to the top. We will go back to our rosemary stems in a few months to see what has happened!

Then we crossed the car park road and walked to the shadehouse to do some propagating from cuttings, roots and tubers.

Thank you Newham and District Landcare for funding this awesome lesson.

**By Alice**