

Tucoerah

The Newsletter of the Georges River Bushcare Volunteers

HOW THE NEW BIOSECURITY ACT (NSW) 2015 AFFECTS BUSHCARE

The Noxious Weeds Act 1993 is to be replaced by the Biosecurity Act (NSW) 2015 that comes into operation on 1 July 2017. The new legislation covers the management of animal and plant pests and diseases, weeds and contaminants. The underlying principle of the scheme is that biosecurity is a shared responsibility between government, industry and individuals.

'Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised.' (s22 of the BS Act)

This sounds rather daunting particularly the term 'biosecurity' that conjures up images of men charging around in 'hazmat' suits but as far as bushcare volunteers are concerned, it is simply making it clear that those of us who know or should know about the dangers of spreading pests and diseases in the bush and farmland should take steps to ensure we do all that is reasonably practicable to avoid the risk. The same obligation rests with farmers, bushwalkers, landscape gardeners, horticulturists and others who work on the land and have some degree of knowledge about potential risks.

What is a 'biosecurity risk'? As far as weeds are concerned while there are a few weeds that represent a Statewide 'biosecurity' risk, in most cases it will be up to Regional Weed Committees to use their local knowledge and expertise to inform the community of their particular weed management responsibilities. It is unlikely that there will be any surprises in the list of weeds we need to control in Southern Sydney.



What do Bushcare Volunteers need to do? Well of course we already control weeds and protect the biosecurity of our local environment. Yet perhaps we can be more proactive. Keep a look out for new weed infestations in the area and check any unusual plants with the Bushcare Officer. Make sure we do not spread weed seed and plant disease when bushcaring or out walking in the bush. And try to disturb the wildlife as little as possible. If you would like to find out more about the new legislation and read some of the interesting discussion papers go to:-
www.dpi.nsw.gov.au/_data/assets/pdf_file/0008/587339/Discussion-Paper-Weeds.pdf



**GEORGES
RIVER
BUSHCARE
VOLUNTEERS**

Hope you like the new Georges River Bushcare Volunteers logo. The Powerful Owl cartoon was designed by the wonderful graphic designer, Tim James who has done work for Bushcare and OFF over the past few years.

The logo is not intended to usurp the place the Eastern Yellow Robin of Kogarah Bushcare or Hurstville's Powerful Owl: those faded and battered shirts and hats bearing the respective logos will become a 'badge of honour'. In years to come 'we few' will be found pointing at the old logos on our shirts and telling everyone how we fought in the Bushcare campaign of 2005, that there were no cream-filled biscuits for morning tea in the old days and jumping ants were as big as your hand!

The new logo provides a point of unification for the two schemes following the council amalgamation. So far the design has met with universal approval as the POWL is a resident of Moore Reserve and Poulton Park as well as Gannons Reserve. It was also time to move on from the slogan '*Bringing back the Bush*' as it has never really been ours to use being the title of a book by the Bushcare pioneers, the Bradley Sisters.

THE STATE OF BUSHCARE & LANDCARE IN THE GREATER SYDNEY REGION

Just in case you did not know how much you contribute to maintaining our Bushland, a recent survey undertaken by Greater Sydney Local Land Services makes interesting reading. In the financial year 2015/2016 more than 13,000 people in the Greater Sydney Region (includes the Blue Mountains and Central Coast) volunteered their time as part of a landcare or bushcare program. More than 7,800 of these volunteers belonged to a group that met on a regular basis. The others attended one-off events such as National Tree Day.

The survey identified 950 active landcare or bushcare groups in the GS Region. Volunteers contributed more than 178,000 hours valued at \$6.2 million in terms of labour (based on an hourly rate of \$35).

The survey showed that local government plays a critical role in landcare and bushcare. 94% of all groups surveyed were bushcare groups supported by council bushcare co-ordinators. Groups identified recruiting more volunteers, on-going funding and support from bush regeneration professionals as key needs to thrive in the future.

Finally, although the survey boundaries have changed in recent years so it is difficult to make accurate comparisons across the years, the number of regular volunteers appears to have remained steady (7795 in 2016 compared to 7542 in 2012).

IMPACT OF OPEN STORMWATER DRAINS ON BUSHLAND RESERVES

As our suburbs get more built-up, with large blocks being sub-divided and houses and units occupying more and more of the available space, rainwater that used to flow onto unpaved ground is now being intercepted by roofs, courtyards, driveways and other paved areas. Some rainwater is collected by household rainwater tanks but an increasing volume is flowing into stormwater drains. Unfortunately many bushcare sites are located on lower lying ground, so the simplest and cheapest way for properties adjoining these reserves is to discharge stormwater straight into the reserve. In some cases the problem is made worse by Council street drains also draining straight into bush reserves.

Bushcare sites which I know have large stormwater drains running into or through them include:

Poulton Park	Myles Dunphy Reserve
Oatley Pleasure Grounds	Johnstone St
Moore Reserve	Marine Drive
Freeman Ave	Depot Rd
Meyer Reserve	Jinna St
Pearce Ave	

The photo below shows a household stormwater drain and a Council street drain discharging into Meyer Reserve Oatley (informally known to bushcarers as Gungah Bay Reserve). There are about fifteen household stormwater discharges into Meyer Reserve that I noticed, but there may be more, as they are often partially concealed.



There are some serious problems created by these quick and dirty methods of stormwater disposal into our bush reserves.

Firstly, the stormwater rapidly flowing across the reserves erodes topsoil in the reserve and deposits it into the nearest waterway, increasing the turbidity of the waterway. Increased turbidity harms aquatic flora and fauna. When the transported material settles out, it hastens silting up of the bay or river.

Secondly, the loss of topsoil means it is hard for any native plants to grow in these eroded areas, so we are left with bare or weedy strips across reserves – see photo.

Thirdly, stormwater runoff into our natural waterways may carry toxic and hazardous pollutant residues such as oil and grease from vehicles, car wash detergent, tyre rubber dust and pesticides, further increasing environmental damage.

Fourthly, urban stormwater carries excessive nutrients, especially phosphorus from garden fertiliser. Phosphorus assists exotic plants, especially weed grasses, to flourish, but does not help and may poison many native plants.



Finally, the continual presence of wet areas near the stormwater pipe outlets enables exotics such as Ehrharta sp and Trad to outcompete native plants. This means bushcarers keep having to come back and remove weeds which would otherwise not grow, or grow more slowly and sparsely.

Why should our public remnant bush reserves be used as a dumping ground for a private property's stormwater runoff? We should pressure Council to change its DA system so that stormwater from any new developments is either discharged to street drains, drained via a properly designed pond system, or fully piped underground to a suitable water course at the developer's expense.

In addition, where there are existing Council street drains discharging into bush reserves such as at Meyer Reserve, we should urge Council to install a new drainage system to drain via a properly designed pond system with a gross pollutant trap, or at worst, drain this water via underground piping to the nearest suitable water course. Ideally this would be in conjunction with connecting all private property stormwater drains into the new drainage system.

Perhaps if each bushcare volunteer whose site is affected by this problem emailed Council to complain, Council might take it more seriously. We shouldn't have to put up with this ongoing "tragedy of the commons" which causes bushcarers ongoing unnecessary work, silts up and poisons our rivers and bays, and damages our scarce bush reserves.

Brian Dale, Bushcare Volunteer

OATLEY FLORA & FAUNA CONSERVATION SOCIETY

PHOTOGRAPHIC COMPETITION 2017

Theme: The Natural World of Georges River Council Parks & Reserves

Deadline: Friday, 1 September 2017

THE BEST PHOTOS WILL APPEAR WITH FULL ACKNOWLEDGEMENT IN THE OATLEY - Nature in the Suburbs 2018 CALENDAR

FULL TERMS AND CONDITIONS OF ENTRY CAN BE VIEWED AND DOWNLOADED AT THE OATLEY FLORA & FAUNA WEBSITE - off.oatleypark.com/?p=6340

WORKING AS A VOLUNTEER AT THE ROYAL BOTANIC GARDENS - Barbara Colquhoun, Bushcare Volunteer

This is an account of RBG volunteering work I have undertaken over the last 3 years or so. It is not representative of all branches of RBG volunteering, just those I have been involved in personally.

All branches require you to sign off on WHS and SWMS, complete on the job training, be committed and take on extra duties where possible. There are many people wanting to join and recently new guidelines were drawn up requiring a basic number of hours per annum.

Initially I volunteered in the Herbarium for 8 weeks. Under the tutelage of a Curator I helped to collate, mount, bag and include in the permanent collection 573 Bryophytes, the most ancient of plants, including mosses, liverworts and hornworts. It was interesting work requiring accuracy in recording data, dexterity in placement of specimens and strength to climb ladders. Access to the Herbarium Library and a guided tour of the historical collection was a bonus.

I then joined the Growing Friends (GF) as a volunteer with the Foundation and Friends (the not for profit arm) which raises money for special projects for the RBG). Duties involve taking cuttings in the Gardens, potting them up and caring for them until they are mature enough to sell. From 11 till 2 Monday to Saturday, the plants are for sale in the GF nursery together with native plants sent from Mt Annan and Mt Tomah.



Barbara working at the Growing Friends Nursery in the Royal Botanic gardens.

Each day has a different team of 12 volunteers, each team has a special group of plants only they can propagate, and the rest are free for all to grow. I joined the Friday team which specialises in Begonias, not a family I was well acquainted with, but have grown to appreciate their versatile qualities, stunning leaf forms and flowers.

I was encouraged by a friend to join her at a monthly meeting of the Volunteer Guides. These are a group of upwards of 120 volunteers and dedicated RBG staff who organise and staff the Information Booth, Latitude 23 Glasshouse and conduct the free

daily walks in the gardens. Senior volunteers also conduct regular Theme Walks and take paying groups from all over the world through the Gardens.

After completing initial training, I was assigned a senior mentor to help in the compilation of my own walk. Walks are one and a half hours and you need to be conversant with at least 15 to 20 trees, shrubs, statues, fountains etc. before you are considered proficient. In the meantime I do duties in the Info Booth and the Glasshouse. Recently a visitor in the Glasshouse was seen to be acting suspiciously and the Ranger was called. His backpack was inspected and found to contain many cuttings. He was fined and banned from the Gardens.

The RBG Volunteers are a wonderful group of dedicated people from all walks of life and with a wide and varied expertise and background. The funding pressures faced by the Gardens means it would be difficult to survive without them.

Editor - Barbara is a longtime Bushcare Volunteer at the Marine Drive Group. They meet on the first Saturday of the month between 8:30-11:30am adjacent to number 35. Work is carried out on the small corner reserve and the more challenging steep 'block' running down to the water. This is one of most idyllic bushcare sites in the area and is worth preserving. Come along and see for yourself, it is one of Oatley's best kept secrets..

Bushcare Trail Camera

Browning Spec ops Extreme Trail Camera BTC8FHDPX 2017

20 megapixel

Full HD Video recording with sound

80ft detection range

0.4 sec trigger speed

Invisible Night Vision Infrared LED Illumination



One of the suggestions on the use of the Bushcare grant money was to buy a trail camera so volunteers and Bushcare Officers can monitor bushcare sites afterdark and keep a watch on wildlife. The camera's sensor is triggered by movement and photos/video taken of the animal/bird etc. If you would like to find out what has been roaming around your garden at night you could borrow the camera for a week or so, set it up in your garden and view the results on your TV or computer. Similar Bushcare Officers will be able to use the camera to monitor nesting hollows, fox movements and sites that are prone to vandalism.

An order has been placed for a camera and it should be available in August so start planning how you would like to use it in your reserve or backyard. They are relatively simply to use and although the camera ordered is not top-of-the range it does take reasonably good images. Any interesting photos or video can be posted on Facebook.

I have received a number of suggestions for using the grant money but it is still *not too late* if you have a good idea how it might be spent to benefit our bush regeneration work. shuhorns@icloud.com

THE EASTERN WATER DRAGON - AN URBAN SURVIVAL STORY

Based on a talk given by James Baxter-Gilbert of Macquarie University's Lizard Lab as one of a series of 'Wild Things' environmental talks organised by Bayside Council.

According to Macquarie University PHD candidate, James Baxter-Gilbert everyone has an Eastern Water Dragon (EWD) story. When he first came to Australia from Canada he was fascinated by these intrepid reptiles and this set him on a path of study. His particular interest is why they seem to thrive in the urban environment.

Generally there is a correlation between urbanisation and the decline of biodiversity. As the urban sprawl takes over, animal habitat is threatened and there is a decline in numbers of birds and animals unable to adapt. Yet some seem to benefit from living in the urban jungle – feral pigeons (rock doves) are now rarely seen outside of the artificial concrete 'cliffs' of our cities and the more assertive birds such as noisy minors and rainbow lorikeets dominate the landscape to the detriment of many of their feathered friends.

The ability of reptiles to adapt to an urban environment has rarely been studied although they seem to be the most threatened of the vertebrates as they are tied to a thermal environment and have a low ability to disperse within an urban setting. Yet EWDs seem to be an exception. Why?

These relatively large omnivores can grow to nearly a metre (including tail). They have long powerful limbs and claws for climbing, and a long muscular tail for swimming. The bite force of an adult male is 'pound-for-pound' equivalent to that of a wolf although thankfully they have small teeth! Nevertheless, James treats them with great respect when handling them for research purposes.

Equally at home in trees or in the water, they can stay submerged for up to 90 minutes. Like all reptiles they need to raise their body temperature to remain active and are most often spotted sunning themselves on rocks close to water. Adults feed on insects, small mammals, fruits and, unfortunately the occasional baby EWD. They hibernate during the cooler months emerging in the Sydney spring when females will typically lay between 6-18 eggs in a burrow. The sex of the hatchlings is determined by the temperature of the nest site. The young tend to group together away from the adults but even so, few will survive into adulthood.

In trying to establish the reasons for their success in the urban environment James is looking at a number of criteria – morphology, performance physiology, cognition, behaviour, reproduction and diet. So far he has not



Eastern Water Dragon sun-baking

found any definitive answers. Urban mothers do seem to be investing more energy into hatchlings, urban hatchlings seem to have a different body shape (smaller overall but with bigger skulls and limbs) but this difference does not carry through to urban adults. Perhaps the most promising line of investigation is the EWD's boldness, a characteristic that seems apparent in urban and 'bush' dwellers.

I know where I would put my money after having our garden 'invaded' last summer by these charming animals, and watching one no more than a couple of metres away leaping up to grab my cherry tomatoes and then sun-baking on the sandstone pillars at the front of our place completely unperturbed by passing traffic, humans and dogs.

The best local area for seeing Eastern Water Dragons is undoubtedly along the creek line downstream from the GPT at Lime Kiln Bay Wetlands although you will have to wait for spring. *Shaun Keays-Byrne, Bushcare Volunteer*

HOMES FOR HOLLOWES - Urban habitat Creation

Georges River Council is drawing on the expertise of specialist arborist, Michael Sullings from Sydney Arbor Trees to create nest boxes in dead trees that would otherwise have been cut down and mulched. The preserving of 'wildlife trees' is increasingly important as urban sprawl drastically reduces the number of suitable habitat trees.

Michael and his team use small chainsaws to 'sculpt' the hollows within the trunk or branch of the tree. The size and configuration of the hollow will depend on both the tree size and the target animals.

In Mid June work was carried out on dead trees in the small reserve near the council Depot in Roberts Road. Obviously not all dead trees are suitable, some have to be totally removed for safety reasons but in this case once the canopy was removed the nest boxes were created in two of the three dead trees. Similar work has been completed on trees in Myles Dunphy Reserve, Oatley Memorial Gardens, Spooner Park and Waterside Parade, Peakhurst.

If you would like to read more about urban habitat creation go to the *Resources on Trees* page on the Oatley Flora and Fauna Conservation Society website.

http://off.oatleypark.com/?page_id=6049



A nesting box for medium size parrots before the face plate has been replaced.

Bat flats. Note the notch at the bottom to allow entry of micro bats under the face plate.