

Honey Bee by Petra Hollar

+ Staff reports | Volunteer reports | Bushcare training | Office matters | Diary dates and events

Newsletter managed by Hornsby Shire Council Natural Resources Branch



hornsby.nsw.gov.au/bushcare



remember A few housekeeping notes

things to

Sign on sheets

- Please DO NOT mail in your yellow sign on sheets. If you have a Trainer, pass them to that person. They need to record information in their field reports.
- Start a new sheet at the beginning of each new financial year ie. in July. Let your Trainer know ahead of time if you need more sheets. Don't photocopy old sheets as they are possibly out of date versions.
- If you don't have a Trainer please contact Bushcare on 9847 6362 or email bushcare@hornsby.nsw.gov.au to arrange for someone to collect them.

Reporting to Councillors

Councillors have asked to be provided with monthly numbers of volunteers, groups and hours worked. Wherever possible this information will be collected by your Trainers. If members of your group work outside Trainer visits, they will be asked to provide the additional information.

Sending large files to the office

Please email all files over 1MB to:

bushcare@hornsby.nsw.gov.au address. Our personal email boxes fill up very quickly. This may mean changing the habit of hitting "reply to sender".

Requesting Council help for non

Bushcare matters

If you find a tree has fallen over a walking track, or someone has dumped rubbish in the bush, or something has happened that you think Council has some responsibility for, the fastest way to get assistance is to call the main phone number 9847 6666, explain briefly what the issue is, and ask to place a Customer Service Request.



From green to greener pastures!

Jean-Philippe Keckman – Bushcare Trainer

The View Street Bushcare group in Cowan would like to wish Heather Knights and her husband Adrian all the best for their upcoming move. In the next few months. Heather and Adrian will be swapping the scenic views of Muogamarra Nature Reserve's sandstone country for the Southern Highlands' rolling slopes.

Heather is one of the inaugural members of the View Street Bushcare group in Cowan, which was started in April 2009. She has witnessed all the milestones associated with the improvement of the Bushcare site: battling with 'nasties' such as Blackberry, Lantana, Whiskey Grass, Crofton Weed and Cotton Bush, observing Pimelea curviflora (listed as a threatened species) in flower and participating in the revegetation of the Bushcare site.

Heather has found taking part in the transformation of the Bushland she looks at every day a pleasant and rewarding learning experience. Catching up with neighbours and like-minded members of the local community has also provided a source of great satisfaction. Heather hopes to bring her expertise in controlling the weeds to the Bowral area where she intends to join a local Bushcare group.

To say that Heather will be missed by all is an understatement. Her positive and friendly personality as well as her enthusiasm has always been appreciated by everyone (past and present) involved with the View Street Bushcare group.

Thank you again, Heather. We wish you and Adrian all the best in the new chapter of your life.



How do I start a Bushcare site?



If you know someone who would like to start a new Bushcare site ask them to get in touch. There are a number of boxes that need to be ticked, some more critical than others.

They include:

- It contains a rare or threatened plant community
- It is located in a critical part of the local catchment
- It has the potential to provide habitat for a rare or threatened animal species
- It is located on Hornsby Shire Council owned or co-managed land
- Members from at least three households are interested in forming a group to work on the site at least once a month, and to become registered volunteers

- It has potential volunteer recruitment opportunities
- It links into and supports other natural area management programs in the sub-catchment
- Funds and staff are available to support the group with a Trainer
- It is accessible from public thoroughfares
- It has good regeneration potential

If the site is suitable we will be glad to help them get started.

Bird monitoring morning with breakfast

ach team will comprise a team leader, an assisting bird expert and team members. The team leader is a bird expert, who can identify birds from their calls and by sight. The assisting bird expert can identify many common calls and identify birds by sight.

Team members are volunteers who would love to know more about birds in Hornsby and improve their skills in bird identification.

We have identified some great "birdos" in Hornsby, both staff and volunteers. See below for the teams and vacancies.

Most importantly a picnic breakfast basket is provided to all survey groups. The contents remain secret but will include tea and coffee and a selection of yummy breakfast food. We look forward to having you on our teams.

When:

Saturday 7 November

Get to site 7.30am start survey 8am and complete a series of 3×20 minute surveys.



There are four survey teams at various locations:

HORNSBY - Rosemead Road

Team Leader:

Bushcare and Nursery Volunteer - David Martin

Assisting bird expert:

Bushcare Volunteer - Richard Mason

Team members:

volunteers required

EPPING - Terrys Creek Team Leader:

vacant

Assisting bird expert:

vacant

Team members:

volunteers required

HORNSBY HEIGHTS - Binya Place

Team Leader:

Bushcare Trainer - Tom Hickman

Assisting bird expert:

vacant

Team members:

volunteers required

WESTLEIGH - Duneba Drive

Team Leader:

Nursery Coordinator - Ross Rapmund

Assisting Bird Expert:

Environmental Scientist - Liz Bulley

Team members:

volunteers required

Each group will be equipped with:

Bird identification books, binoculars, and data recording sheets (to be returned at the end of the day).

Participating volunteers will receive a complimentary CD recording of common bird calls prior to the day (for them to keep).

Book through Natural Resources Administration by phone on 9847 6832

or email naturalresources@hornsby.nsw.gov.au

Your stories and news items are always very welcome. Contact our Bushcare Officer on 9847 6362 or email bushcare@hornsby.nsw.gov.au King Parvot by David Hooper hornsby.nsw.gov.au/bushcare 5

Bushcare major day out

his year we celebrated the Bushcare Major Day Out at the Mount Colah Community Centre Bushcare Site. Amelia Jones, Stephanie Chew and Leanne Johnston were on hand to make sure all our volunteers had a great morning of weeding, planting and finding out more about fire and its importance to local vegetation. The Mount Colah site was chosen because the group is in need of some new recruits and we wanted to generate some local interest.

On the day we had ten new volunteers attend who had never done any bush regeneration before. Armed with pouches and armoured in enthusiasm they marched down from the guide hall to the edge of a site recently burnt for ecological restoration. We cleared around the native plants to rescue *Microleana, Acacia* seedlings, *Lomandra, Oplismenus, Dianellas* and many more. The lovely Selene, who came with her family, found a millipede and was so proud of her discovery she showed the whole

group. Our volunteers were delighted to have a budding entomologist amongst our young recruits.

The next activity was to plant some Lomandras along the entrance to create a barrier to wind dispersed weeds. The kids were so excited about planting, most of the volunteers remained at the weeding site, where interested passers-by enquired about our activities. Some took applications in the promise of joining the program. We hope to see them on site soon.

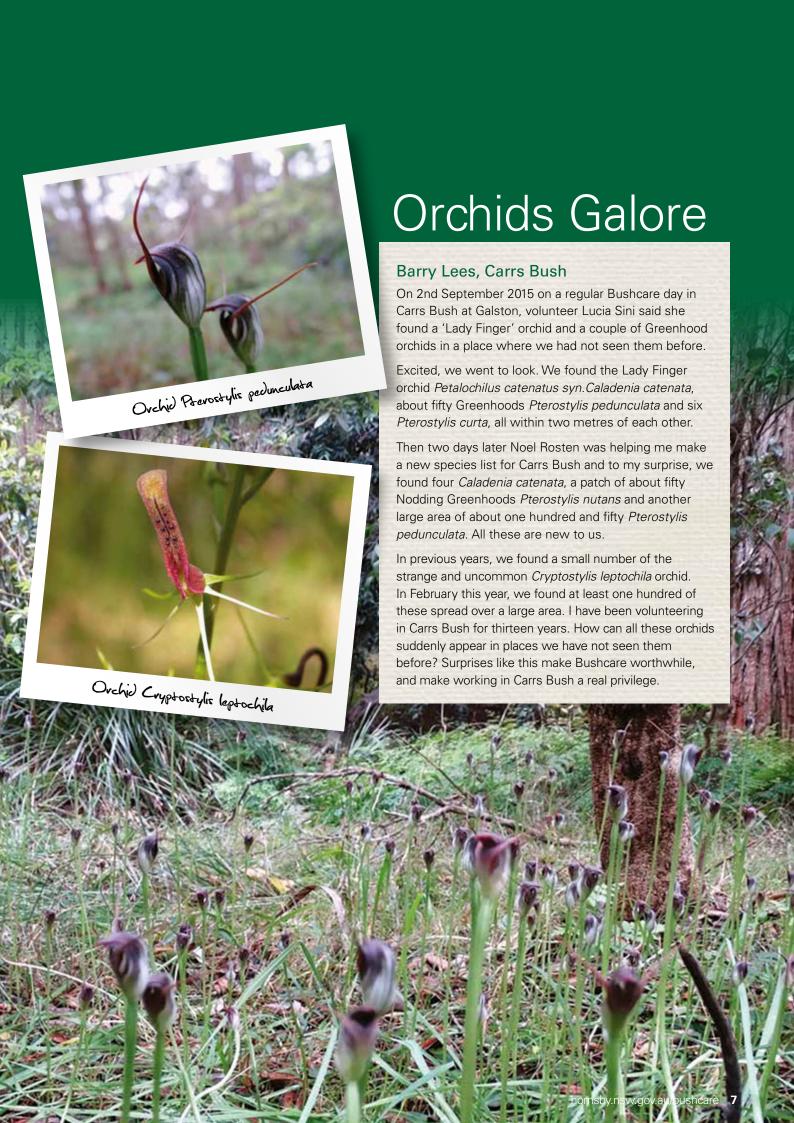
Following our brief planting session everyone went on a tour of the burn site. This Bushcare site is part of the Pierre Close bushland. The reserve is just under 8 hectares of which approximately 1 hectare is natural bushland and the burn area covered just over ½ hectare. This reserve was chosen to burn because the vegetation structure was in decline, the soil profile was intact and there was fuel on the ground. The canopy was dominated by *Allocasuarina*

littoralis with some *Angophora* costata and *Eucalyptus haemstoma* that were in decline.

In order to prepare the area for a burn Amelia Jones arranged for some of the *Allocasuarinas* to be felled to increase the fuel load and produce a burn mosaic, where some areas burnt hotter than others to recreate a more natural fire. The burn was a great success and the subsequent natural regeneration has resulted in more native plants than ever recorded.

Thank you to the Bushcare volunteers who attended on the day. We really appreciated your enthusiasm and the knowledge and skills you were able to impart to our newest volunteers. Liz and Gael you were great at engaging passers-by and demonstrating the wonder of the natural world to our tiniest volunteers.





National Tree Day Terrys Creek, Epping

e had a small but enthusiastic roll-up for our tree planting event on the last Sunday in July. Robert and Jutta from Lindfield arrived early and helped with setting up. They are familiar faces at Australian Plant Society gatherings and also spend time at the Community Nursery in Forestville, so their informed assistance was particularly appreciated. Most of the youngest volunteers attend the nearby



The site chosen for planting is along the bank of Terrys Creek just inside the Hornsby Shire Council's southernmost boundary, adjacent to other plantings. The surrounding area, managed as an open mown space for decades, had been identified as a suitable location for fabricating a forested landscape to commemorate all the canopy trees and that are being removed from elsewhere in the Shire. Plant species for introduction to the site were being selected from the Blue Gum Forest vegetation community, a remnant of which grows nearby.

Too often National Tree Day planting sites languish afterwards for lack of ongoing maintenance. However in this case funds have been found to look after the planted areas and perhaps even expand the work.

We also provided trays of local native plants for pre, primary and high schools in the Shire with an environment group or some other arrangement for ongoing care of the plants. Fourteen schools took up the offer. We will. endeavour to engage more schools next year. Most schools on our books are situated in what was Blue Gum Forest (BGF) or Turpentine Ironbark Forest (TIF), which are both nationally listed as critically endangered, with less than 0.5% of their pre settlement range remaining.

A total of a big one thousand plants were put in the ground. A round of thanks to the teams of volunteers who generate such healthy plants under the guiding hand of Nursery Coordinator - Ross Rapmund.

Staying cool in warm weather

redictions are we are in for a very warm dry summer. Whether or not you "believe" what the weather scientists say it is wise to take precautions.

Avoidance is the surest option. If the temperatures reach into the thirties reconsider the timing and nature of your outdoor activity. Keep an ear out for fire hazard alerts as we don't work on Extreme Fire Danger days. Your site might not seem a likely location for a fire but the combination of high temperatures, hot winds, and dry air and soil, mean the plants you are aiming to protect will be experiencing environmental stress, and would be better off being left alone.

If you decide it is okay to work then have a good drink of water before hand, and have a top up every half hour at least. Tea, coffee and alcohol cause dehydration and should not be considered alternatives to water. Dehydration is one of the most common heat related illnesses and can develop into quite serious conditions.

Dress cool, and find something to do that's in the shade (preferably with a light breeze!), not too strenuous, and work at a slower pace. If a physically demanding task needs doing, get others to help you and take lots of breaks.

Be mindful of the symptoms of heat stress in yourself and your fellow workers. Check your fellow workers for feelings of dizziness, nausea, headache, faintness or changes in heartbeat (these symptoms often go unnoticed unless deliberately looked for). They are all indications of heat stress. Encourage the person to lie down in a shady place and call for assistance.

Chemical-free Weeding

Extracted from notes taken by Bushcare volunteer Barry Lees, who attended a seminar on the topic in March. Reproduced for those that didn't read the online Winter enews.

n Australia, \$1.4billion is spent on herbicides every year. In addition, manufacturers spend millions of dollars encouraging and guiding people in the use of weedicides. Very little is spent on pointing out the damage being done by chemicals and encouraging people not to use them. There are many options to help in weed removal without using chemicals, e.g. fire, soil organisms, animals, increase health of desirable plants, biological controls, better design of open spaces, and learning to live with some weeds. Some alternatives were described at the seminar.

An ecologist from GHD (an international environmental services company) suggested there is a problem of perception. Many weeds are not a problem and we should be more tolerant. Sometimes the cost of buying and applying the chemical, and the potential damage done to the sprayer and the environment can be greater than the effect of leaving the weed in place. He suggested a 'negotiated peace' with many weeds. Weeds can provide increased biodiversity, eco-system services, soil improvement, food for humans and animals, medicines, oxygenation of waterways, pollution removal and erosion control.

Something to consider when next facing a wall of Lantana.

Steam Weeding

- Steam destroys plant cells in a fraction of a second, can be done any time of the year and has no fire risk.
- reduced off-target damage,
- no bad public image (people in overalls, gloves and respirators spraying in public places),
- no herbicide resistance, no stormwater contamination and habitat contamination.
- is quicker, cheaper and more effective than ever before.

Using goats to control weeds

Goats for weed control was described by two companies. Generally, goats:

- Are economical,
- can work on very steep sites,
- often destroy seeds (goats are ruminants),
- fertilise the soil,
- require no chemicals,
- reduce fire risks,
- eat to ground level and the plants can be easily managed as they grow,
- can kill plants like blackberries by continually pruning the foliage and leaf buds, and
- do not harm soil fungi, insects or worms.



Past newsletters can be viewed in colour on Council's website hornsby.nsw.gov.au/bushcare

Simpson Desert surprises

Contributed by Bushcare volunteer Mark Cachia

n a wet Wednesday morning in early September 2014 I arrived at the University of Sydney (USyd) to take part in a Rat Catchers Desert Research ecology field trip to western Queensland to study the flora and fauna of the Simpson Desert. We would visit three old cattle stations: Tobermorey, Craven's Peak and Ethabuka, the latter two of which are now wildlife refuges owned by a private conservation company, Bush Heritage.

As with most long distance trips nothing ever goes according to plan. We arrived at 8am to pack the three 4WD Hilux's but learned that Jane's research packages had been sent to the wrong university. While waiting for them to be couriered back I met the rest of the team : Jane, a PhD student from UWS Richmond, Chris, a longtime USvd student and now Field Coordinator for these Desert Trips, two USyd alumni, a professional kitesurfer, a student from Denmark working with the Royal Botanical Gardens, and a 3rd year student from ANU about to undertake an honours project.

We finally left at 11.30am! Eleven hours of driving later we arrived at Bourke. On the way we had experienced the start of the outback. The changes in vegetation were fascinating; from woodlands dominated by *Eucalyptus tereticornis*, *E. albens, E. macrocarpa* and *E. populnea* to Acacia woodlands and low shrubland dominated by species such as Emu Bush *Eremophila longifolia* and *Eremophila maculata*.

After a fantastic breakfast at the Bourke Bakery we wasted no time and crossed the border near Barringun, Queensland. We then headed up through Cunnamulla and west to Quilpie, crossing some of the Diamantina River before arriving in Windorah.

Wow! This usually sleepy town of 150 people had expanded to about 1500 people for the International Yabbie Races. Some yabbies had hilarious names: "Ribbed and Ready" and "Pooh Bawl", while others had names I cannot mention for decency reasons. It was a great night with crowds betting up to \$700 for a yabbie and cheering on from the grandstand.

On our drive on day 3 the outback landscape changed from semi-arid to arid, and became devoid of any noticeable vegetation for long distances across paddocks and gibber plains. Every once in a while you would see a small rocky hill rise up out of the horizon or a line of river pebbles marking one of the many tributaries of the Diamantina River which flow in the wetter months. Casuarina pauper and Triodia spp. (spinifex grasses) were the main plants. While on the road we saw a Bearded Dragon, a Sand Goanna and an Echidna which some members of Hornsby Bushcare would be quite familiar with. Although I don't think our local populations would cope very well in the hot and dry here.

Once we set up camp at Ethabuka we got a chance to explore our surroundings. For the past five to ten years the research group has camped at this spot in the swale between two large red sand dunes under the shade of some Georgina Gidgee Acacia georginae. There was a rusty old caravan which became a welcome haven from the flies that surrounded the camp after the first week.

We each had a timetable of activities which got busier as the days wore on. In the first week we cleared out and checked traps at all the properties. Most were pitfall traps designed to catch small reptiles as well as the odd mammal. Shame we weren't trapping for invertebrates as we caught a great variety of spiders, scorpions and many ants.

Evenophila lonpifolia

Traps at each site were set up in grids on the dune, on the swale (base of dune) and underneath the gidgee trees, to study the diversity and abundance of small mammals and reptiles in different habitats. Some of the first species we recorded were: a Sand-swimmer Lerista bipes, Spotted Skink Ctenotus regalis and the Marsupial "Mouse" Antechinus stuartii.

Our next task was to help create "fake" animal shelters using chickenwire and PVC pipe. These shelters allowed predators to get through and would be used as controls compared with correctly erected shelters that prevented predator access. In total, five tunnels on four research grids were installed.

From the second week we also got involved in Anna's research project: catching small dragons, observing and recording bite marks on clay models of dragons, and radio tracking some of the dragons to help determine the extent of their territories. The project focused specifically on the Central Military Dragon *Ctenophorus isolepis* and Central Netted Dragon *Ctenophorus nuchalis*.

To catch the dragons we had to use a noose made of nylon thread at the end of a small fishing rod. This process took a lot of trial and error, and we spent hours walking around in the desert sun trying to catch



lizards which was considered quite an achievement!

To observe and measure predation on small dragon lizards we placed clay models out early on the first morning, and recorded the bite marks and scratches morning and afternoon for three days. There were 52 locations in various microhabitats such as: "on wood," "in tussock," "in open" and "on leaf litter". Each bite or scratch mark was photographed, measured, and the type of predator estimated from bite or scratch features. We found that compared to the wet season there was a much lower occurrence of predation with raptor attacks almost non-existent. The majority of attacks were from reptiles including the Sand Goanna Varanus gouldii, and other dragons that saw the clay figures as a threat to their territory. About halfway through the project we had to spend some time searching in the sand to find the models after a dust storm completely covered them!

Lastly, the most exciting and regular task for Anna's project was radio

with nooses over the previous days. We used the radio tracking receiver and antenna to track the lizards across the terrain at 6am, 12pm, 3pm, 6pm and 9pm for each of the twelve individuals, six of each species. One day one individual 'dispersed' which means it went from travelling 200 metres every 3 hours to 1-3 kilometres every 3 hours and kept on running! It crossed at least two large sand dunes before we lost the signal. Who knows how far she went in then end.

In the last week of our trip, thanks to Chris and Alex who had become skilled wood carvers over the years in the desert, we got the chance to make our own wood carving from local desert wood. I chose Georgina Gidgee and made an abstract piece showing the curves and turns of the desert dunes, tussocks and old river beds.

On our last full day as were coming back from radio tracking, we saw some tracks in the sand that looked like little footprints but with no tail prints on the ground. We followed

these tracks and lo and behold, to our surprise and excitement we saw a Thorny Devil Moloch horridus!

On our last day we went down to the local water hole known as Lake Pulchera to wash off some of the dust. This nice, cool shower - our first in four weeks - was amazing! Then with a heavy heart it was time for us to head back. We slowly drove back into civilisation to resume our day to day lives.

I would like to thank the Sydney University Desert Ecology Research Team including Dr. Chin-Liang Beh, Chris Tamayo, Alex Nelson, and of course Professor Chris Dickman and Glenda Wardle for getting it all setup in the first place. I would highly recommend this trip at any time of year, especially if you are interested in ecology. Go out with the rat catchers and find out what it's like! You'll get to see a side of Australia you may never see otherwise.

Abuklea Bushcare gets a Biofilter Basin

ornsby Shire Council recently completed construction of a biofilter at the lower end of Abuklea Road, Epping.

The site previously had a small sediment basin below a stormwater outlet with a weed plume spilling down into Terrys Creek through otherwise healthy Peppermint Angophora Forest transitioning into Turpentine Ironbark Forest vegetation. It had been the bane of the Abuklea Bushcare group since they started work in 2000.

Key objectives of the project were to:

- Improve the quality of stormwater runoff entering the bushland and waterways downstream of the outlet
- Reduce weed infestation and encourage the regeneration of native vegetation at the site

The biofilter can be described as a vegetated sand filter designed to capture and treat stormwater runoff. Stormwater pollutants, such as heavy metals, nutrients and hydrocarbons, are removed through filtration and biological uptake by the 1200 plus plants supplied by the Community Nursery. The treated stormwater is then released slowly back into natural drainage paths.

Construction involved major earthworks, including rock walls and earth batters. In addition, the site was sandstone capped to smother the weed seed bank.

Funding for the construction and ongoing upkeep of the system is provided under the Catchments Remediation Rate (CRR) Capital Works program.

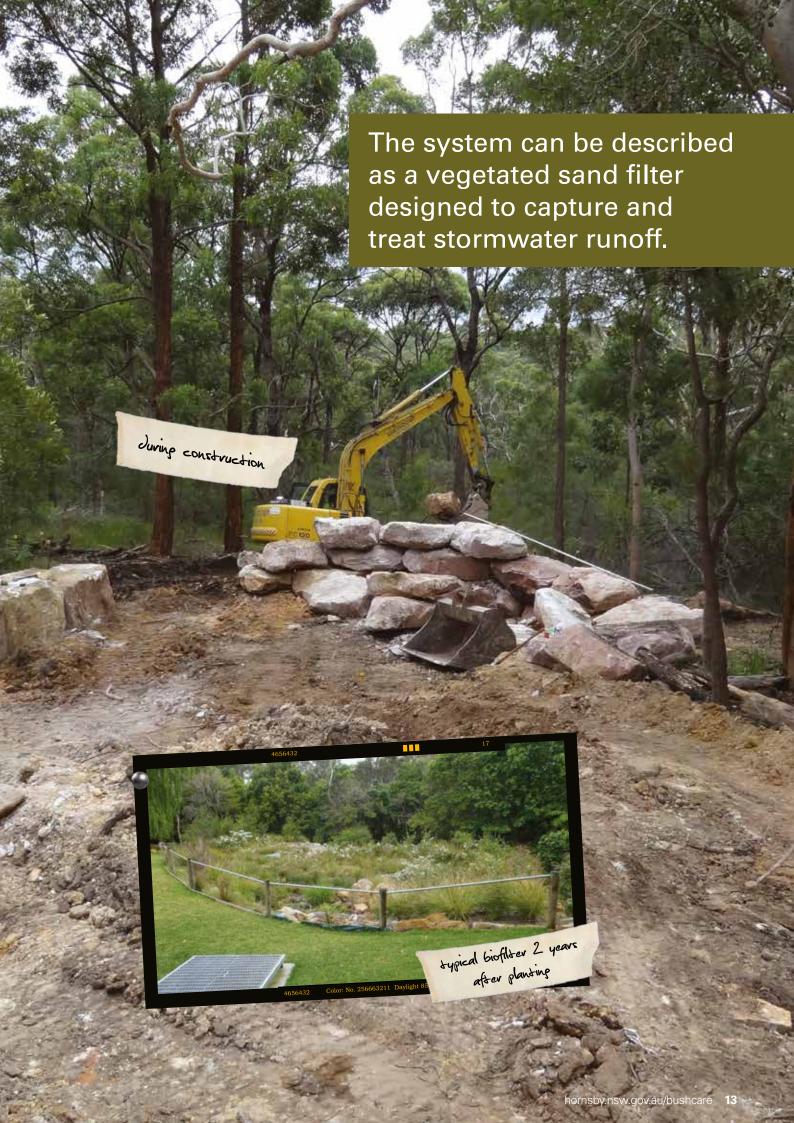
The basin construction gets a big gong from Bushcarer Charlie Miller. He wrote to Project Leader David

Beharrell: "You, your Council Team, and your Contractor Team, all deserve congratulations on the way this whole project has been handled and implemented."

"No fuss, no mucking around, just quiet efficiency and getting on with the job. Pleasant friendly people to have around. On sometimes irritating issues that you see on other construction sites, not here - good marks again - no littering, no undue noise, everything clean and tidy."

The Bushcare group, together with contractors, will carry out maintenance sweeps around the perimeter of the basin to prevent the establishment of any weed species that were unable to be removed during the construction stage, or that were unintentionally introduced. They will also monitor for natural regeneration of local species, including the threatened shrub Epacris purpurascens var. purpurascens.





Hornsby walking tracks get the treatment

Reddy Park Track Upgrade

Reddy Park had several eroded trails through the high conservation bushland remnant. These were formalised and upgraded by re-contouring the trail surface and improving the trail drainage to reduce the boggy conditions often experienced by walkers in wet weather. 360 metres of trail was upgraded with crushed sandstone, new steps and cross drains. Interpretive signage will be installed in late 2015.





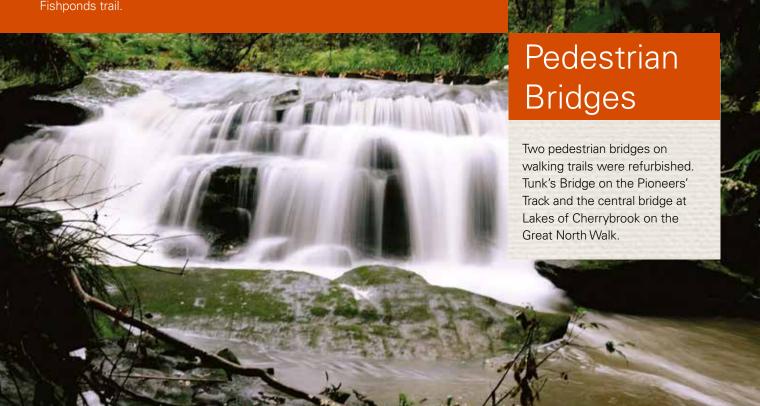
The Falls of Cherrybrook by Rebecca Dawborn

Blue Gum Track

Upgrade works included two large sections of fire trail near the end of Rosemead Road and Ginger Meggs Park, a variety of improvements near the picnic area at Rosemead Road and twenty steps at the entrance to Fishponds trail.

Callicoma walk

A sixty metre boardwalk and steps were installed on a portion of the Callicoma Walk to improve track durability and to reduce the spread of the soil borne plant disease called Phytophthora.



Galston High School Gives Bushcare the Thumbs Up

ane Smith, teacher at the Rumbalara Environmental Education Centre, asked Hornsby's Natural Resources Branch if we could provide some expertise for an environmental education activity day for their Year 7 enrichment class at Galston High School. The response was impressive. We were able to offer not only two Scientific Officers, Alex from the Biodiversity unit and Leanne from Bushcare, but also a swag of highly experienced Bushcare volunteers: Noel and Rae Rosten, Barry Lees, Pat Pike, and Gordon Limburg.

The students were a great bunch, willing to have a go at all the activities; to follow instruction; and to work together as a team to gather data. At the end of the day the students were able to perform meaningful statistics on their data. This was a great practical maths exercise where the students had to look for real solutions to real problems using their problem solving skills.

"I just wanted to follow up our event on Wednesday with a big Thank You! to you all. Your participation in the day was invaluable and very much appreciated." "Of course, the main feedback from everyone - including the students - is that we

needed more time to do the vegetation work - and we will modify our schedule for future events."

"I was really impressed with the students - and how receptive they were to the vegetation activity. They were listening and really interested in what my guest volunteers had to say (Barry, Gordon and Noel) - as was I myself - I just wish it had

been twice as long.

"The students gave very positive feedback. We asked them directly what they thought of that session - and there were no negatives. We had comments like "it was good to see the work you were doing"...."everything is connected". I think Gordon's example of the impact of residential development on the yellow flowered plant illustrated that so well. Watching the students - they were pretty much engaged for all of that time".



Threatened Species Day Walk along Terrys Creek





his year we chose Terrys Creek as the site for our annual Threatened Species Day walk. The creekline is a functional wildlife corridor located in Hornsby Council bushland, part of the Lane Cove National Park. It has high conservation value, providing an important stopover point for migratory birds and habitat for rare and threatened native fauna. Over 98 species of birds have been recorded along the creek between 2007 and 2014 including the Lyre Bird. It also supports endangered plant communities.

The walk commenced at Vimiera Park where walk guides Leanne and Paul discussed Threatened Species Day and its significance, the presence of Blue Gum High Forest in the park and its loss from the surrounding Epping area and beyond; and the success of the 2010 National Tree day restoration project contrasting the groundcover of native grasses, forbs and herbs in the regenerated area with the Trad dominated groundcover near the creek.

We then moved along the track highlighting the variety of eucalypts present and their different diagnostic features as well as noting the range of understorey and ground species. In this middle part of the walk the section characterised by a well-developed Grey Myrtle sub-canopy was a highlight due to its relatively weed-free nature and the numerous epiphytes and lithophytes present.

Emerging from the shale influenced soils upstream of the waterfall to the sandstone-influenced soils beyond, changes in floristics were noted with a different suite of canopy and shrub species present.

After breaking for morning tea near Epping Road we started the return trip. Having been told that a Powerful Owl Ninox strenua was known to be roosting near the Bushcare area below Pembroke Street, Paul went off into the adjacent privet-infested area along the creek to search for it while the rest of the party continued along the track. Just after the group reached the top of the steep stairs leading back to Dence Park Paul caught up to drag them back down again to see the regal raptor aloft in a tall large-leaf privet holding the remains of a ringtail possum in its talons. Buoyed by sighting the nonchalant Ninox, the return walk to Vimiera Park was not strenuous.

Shortly after the walk we received an excited email from ex- Bushcare and Nursery volunteer Irene who continues to be a passionate advocate for the wildlife of Terrys Creek even though she has moved to the far end of the state.

An email from Irene

"Terrys Creek has welcomed three new Powerful Owlets this year.

"The two breeding pairs were successful again this year. Referred to as the Pembroke and Lucknow Owls (they were first sighted there, however as you know they use both sides of the corridor and their nesting tree is on the opposite side of the creek in Hornsby Shire), there was one owlet from P and two from L.

"Thanks to Jenny Stiles I am able to keep updated! Hope all is going well with you all. I am keeping the Terrys Creek website going www.terryscreek.weebly.com and update the blog site regularly."

> Image opposite Powerful Owl by I Timmins



Learning to live with Brush Turkeys

hile Aboriginals held sway the Brush Turkey would have kept to rainforest gullies, avoiding human contact because people probably raided its mounds for eggs and actively seeks human company. Its behaviour is now very different. It has become a highly urbanized bird.

Given a clear choice between two alternatives, males almost always site their mounds close to human habitation, either on the edge of town, or increasingly in the town itself. And their numbers seem to be exploding.

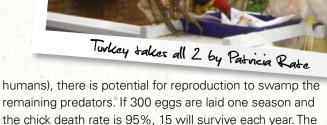
David Wells who has been studying these birds for a number of years comments: "On almost all occasions when I have located birds in non-urban areas, it has been in association with human habitation. I have been effectively unable to locate a population truly remote from humans."

Why urbanization? Reasonable best guesses are:

Food. Brush turkeys will eat virtually anything, and the females in particular are very hungry during the breeding season because of their need to lay resource-rich eggs. Chicks learn to recognise food by individual trial-and-error, so what functions as food will be treated as food.

Predation. Most chicks fall prey to domestic cats, but there are probably more hiding places and fewer predators in a domestic garden than there are in an equivalentlysized piece of natural bush. And of course humans are no longer a predator.

Breeding system. Given a good supply of food, and the removal of at least one significant predator (namely



remaining predators. If 300 eggs are laid one season and the chick death rate is 95%, 15 will survive each year. The death rate only has to drop from 95% to 90% for survivals to double from 15 to 30.

What's with the mounds?

Brush turkeys belong to a group called the Megapodes, meaning 'large foot'. They could also be called Megamounders except that's not an accepted scientific term. Uniquely among birds, Megapodes incubate their eggs using environmental sources of heat, usually microbial decomposition in a mound which the male bird assembles from available leaf-litter and soil. The mound acts rather like a compost heap, and is usually constructed away from direct sunlight, and hence protected from day-night temperature extremes and substantial moisture loss.

If you would really rather not play host to a Brush Turkey mound in your garden, get in touch with David. He can help you find sensitive and environmentally sound ways to recover your garden. He has a PhD in animal behaviour from Macquarie University. His website is www.brushturkeysolutions.com.au

Bushcare Christmas Party

The 2015 Buschare Christmas Party will be held at the Berowra Community Centre, Gully Road, Berowra on Saturday 28 November from 10am-2pm. We are very excited about hosting a Christmas Party adjoining a Bushcare site. I'm sure the team at Berowra Oval will be there to talk about their site.

This year we will have a buffet lunch and we will have plenty to celebrate as one of the long standing programs in the Hornsby Shire.

We will do things a little differently this year. Please bring your own table setting, plate, knife and fork and cups. This will allow the Bushcare Trainers and other staff to spend less time in the kitchen cleaning up and more time to talk to you.

Remember this year we want to see your creativity with textiles. Everyone attending the Christmas Party is welcome to up cycle their Bushcare hat in a Christmas theme. Get creative! The Hornsby - My Beautiful Bushland photo competition will be judged on the day.

The Bushcare 2016 Calendar will be distributed at the end of the party so be sure to get your copy as you leave. If any of your fellow Bushcarers are unable to attend you can grab an extra copy for them, or please contact 9847 6362 and we can arrange for a copy to be delivered.

Please RSVP by Monday 16 November as seating numbers are limited. Make sure we know if you have any special dietary requirements, e.g. vegetarian, gluten free etc.

We look forward to seeing you at the Christmas Party.

Diary dates

Compost and Worm Farming workshop

Composting is a fun and easy way to recycle your garden and kitchen waste. Compost improves your garden soil, saves space in your red or green bin and saves you money.

When?

Friday 6 November

Where?

Wallarobba Garden, Edgeworth David Avenue, Hornsby

Bookings?

Essential as spaces are limited. Book online at

hornsy.nsw.gov.au/whatson or call the Waste Hotline on 9847 4856.



Bushcare Bird Survey and Breakfast

Come along and learn about bird surveys. If you are enthusiastic about our local birds but can't tell the difference between a Noisy Miner and an Indian Myna then this is the workshop for you. Experienced team leaders will be on hand to conduct bird surveys in selected Bushcare sites throughout the Hornsby Shire. Our team leaders have excellent skills in identifying bird by sight and calls. If you have these skills we have a vacancy for a team leader. Alternatively you could be an assistant, someone who can identify common species in Hornsby. A delicious breakfast picnic will be supplied to all teams.

When?

Saturday 7 November 7.30am for an 8am start

Where?

4 locations, Hornsby Heights, Hornsby, Westleigh and Epping (details supplied upon booking)

Bookings?

Essential as spaces are limited. Phone 9847 6832 or email naturalresources@hornsby.nsw.gov.au

Propagation workshop

Want to save money by growing your own vegetable seedlings? Come and learn the easy skills of propagation. Basic skills on how to grow from cuttings will also be covered.

When?

Sunday 8 November

Where?

Gazebo, Eco Garden, Fagan Park

Bookings?

Essential as spaces are limited. Book online at hornsy.nsw.gov.au/whatson or call the Waste Hotline on 9847 4856

Recycling Tour

Ever wondered what happens to the mix of materials in your vellow bin? Come on a tour of the Materials Recycling Facility and find out how your paper is recycled from your plastic containers.

When?

Wednesday 11 November 9am-1pm (bus leaves 9.15am Hornsby Park bus stop, Hornsby)

Bookings?

Essential as spaces are limited. Book online at hornsby.nsw.gov.au/whatson or call the Waste Hotline on 9847 4856



Chipping for Mulch

Bring along your green waste for chipping and take home free mulch. For information about what is accepted and not see Councils website for full details.

Sunday 15 November

8am-2.45pm The Old Dog Pound, next to 8 Warrigal Drive (RFS)

Sun 13 December

8am-2.45pm Council Depot, Johnson Road, Galston Please note you need to book into most events, and numbers are limited. If you don't book the event may be cancelled.

Bushcare Christmas Party

Come along and enjoy a delicious lunch amongst friends. This year we are asking everyone to bring along their own settings: plate, cutlery and cup. That way you can spend more time talking to the Bushcare Trainers, the Environmental Scientists and the Coordinators. There will be plenty of time to look at one of our long standing Berowra bushcare sites.

When?

Saturday 28 November 10am-2pm

Where?

Berowra Community Hall, The Gully Road, Berowra

Bookings?

Essential. Phone 9847 6832 or email naturalresources@hornsby.nsw.gov.au

Keep up to date

For more information about events register for weekly email updates at bushcare@hornsby.nsw.gov.au Pick up a copy of the 2016 Calendar - out in December!

Do we have your current email?

Have you moved, changed jobs or just changed your email address? If so, please update your details with us. By choosing to view you get to save trees and you will also be one of the first people to view the latest newsletter!

Bushcare Group Leader Forum 2016

We are pleased to announce we want to continue to regularly host Bushcare Group Leader Forums.

The forums are a great way for your group to have a say on the bushcare program, a place where you can express your ideas and discuss the activities that you as a volunteer would like to pursue.

The presentation format will be the same as 2014 with two opportunities to attend being offered: one session being held during the week and one on the weekend. Three topics will be presented and then workshopped by the group leaders at the forum. We will send out the results of the

discussion and accompanying action plans.

Last year the three topics we discussed were Work Health and Safety; Promotion and Recruitment of Bushcare Volunteers; and Site Plans. We assessed your feedback for do-ability, prioritised actions and endeavoured to put in place all the recommendations. We have implemented new procedures in our Work Health and Safety measures. We have promoted Bushcare more widely in the community and almost

all of our bushcare sites now have updated site plans.

We have our own ideas about what we'd like to get your thoughts on but if you have any topics you would like the wider group to discuss please resend them to bushcare@hornsby.nsw.gov.au

Almost every week there is a part of the Lives and the part of the



You can send your stories or letters to the Editor for the next edition by 1 JUNE 2016

Fax: 9847 6362 Mail: PO Box 37, Hornsby 1630 or Email: bushcare@hornsby.nsw.gov.au

This newsletter has been compiled

by the Natural Resources Branch and Bushcare volunteers.





THE BUSHLAND SHIRE
If not claimed within
7 days please return to
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Hornsby NSW 1630

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