Bushcare nevs

Annual award winners 25 and 15 years of service

Christmas party Bushcare and Nursery

Photo competition Have a look at our winners

25,000Trees by 2020 Tree planting project

Nursery upgrades Exciting new additions

Kids into bushland 8 easy bushwalks

Image: David Hooper

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



For more information visit hornsby.nsw.gov.au

things to reme<u>mber</u>

A few housekeeping notes

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.

Bushland Programs Team

Coordinator - Bushland Programs Team Vacant Tree Care Project Officer

Donna Fitton Environmental Scientist – Bushland Reserve Management (North East) Jean-Philippe Kecman

Environmental Scientist - Bushland Reserve Management (South)

Ty Suter

Environmental Scientist - Bushland Reserve Management (North West) Robyn Cox

Environmental Scientist – Bushcare Leanne Johnston

Bushcare Field Officer Vacant

Nursery and Guided Bushwalk Program Coordinator

Ross Rapmund

SAFEHOLD

Incident and hazard reporting 9847 4848 including outside business hours

Updates

Congratulations to our Bushcare volunteer Ross Walker

It is with great pleasure we express a big congratulations to Ross Walker for receiving a Medal of the Order of Australia in the General Division for service to the community of Beecroft.

Ross is a long term Bushcare volunteer with almost 20 years of volunteering at Chilworth Reserve and Hull Road Bushcare sites. This is not Ross' only community involvement; he is an active member of the Beecroft Cheltenham Civic Trust, the Save Beecroft Cheltenham Alliance and one time member of the Hornsby Shire Council's Bushland Management Advisory Committee. Last year Council appointed Ross Walker to serve as 'non-expert local member' and alternate for the 'expert local member' on the Sydney North Planning Panel (SNPP) for a two year term.

Congratulations Ross on your well-deserved recognition.

Sara Thomas (Bushcare Trainer)

Unexpected and difficult news has been delivered to us. In late January, Sara was diagnosed with leukemia and had

to be rushed to Royal North Shore Hospital for treatment. Sara went through an initial round of chemotherapy in early February.

She was allowed to return home for a couple of weeks before starting a second round of chemotherapy early March. Her morale is good and we are hoping to welcome her back with the Bushcare team towards the end of the year.



SaraThomas

Bushcare Calendars still available from the Cottage

We have a limited number of 2019 Bushcare Calendars available at the cottage. Alternatively please contact Leanne on 9874 6362 or bushcare@horsnby.nsw.gov.au to arrange for a calendar to be sent to you. There is also a weblink for the Calendar located under Bushcare Volunteer Resources on the Bushcare webpage:

Council's Natural Resources Branch restructure

The Natural Resources team is working hard to develop strategies for a better environment. By the end of this year we will have:

- Biodiversity Conservation Strategy
- Urban Forest Strategy
- Urban Heat Strategy
- Water Sensitive Cities Strategy
- Environmental Sustainability Strategy
- Climate Adaption Strategy

- Bushfire Management Plan
- Walking Track Masterplan

To ensure the above Strategies are better integrated into general Council business our Sustainability team now form a part of the new Strategy and Place Unit who report directly to the General Manager.

Safe Operating Procedures: Your safety matters

The Bushcare volunteers Field Activities Safe Operating Procedures (SOPs) have arrived! No doubt you are all familiar with the latest safety related piece of documentation produced by Council to ensure you are as safe as can be when working at your Bushcare site. Or are you? Let's make sure everyone is up to date.

Most of you would remember spending half your Bushcare session reading through and signing a 24 page document. Well, changes have been made by reducing the length of the document and by making it easier to read and understand. Under the Work Health and Safety Act 2011, it is Council's responsibility to ensure that volunteers go about working on site in the safest manner possible.

The Safe Operating Procedures for Bushcare volunteers highlight the common hazards associated with Bushcare field activities and how to reduce risks when working on site. It also a useful reminder of what it implies to be a Bushcare volunteer.

Please take the time to read, date and sign the SOP. If you have any questions, your Trainer will be able to answer them. Remember to call Council's Safehold line on 9847 4848 to report any incidents and/or accidents on site. Alternatively, incidents can be reported online through the Council's main web page.

Stay safe and keep on enjoying Bushcare!



Bushcare & Nursery Christmas party

2018 was a great year for the Hornsby Shire Council's Bushcare program.

ur Bushcare volunteers contributed over 5800 hours caring for our local reserves. The number of active bushcare volunteers increased by 10% and we recruited 85 new volunteers.

Similarly, the nursery had another impressive year. Nursery volunteers contributed over 3100 hours to the program, produced 46,000 native plants and distributed a record number 53,000 plants (up 40% on last year).

Our new program 25,000 trees by 2020 hosted 5 planting days where a total of 542 volunteers planted 1877 trees and 9938 shrubs and groundcovers. In addition, residents took over 1300 trees home to plant in their private gardens. There are many opportunities for you to plant trees in our reserves.

The Christmas party was well attended with 125 guests including our General Manager, Steven Head and Councillors Robert Browne, Mick Marr and Emma Heyde.



Councillor Mick Marr and Christie Woolcock



Local legends Pat Pike and Rae Rosten



Councillor Emma Heyde and Yvonne Yeung

Annual award winners

25 Years of Service

We had five groups achieve 25 years of service. Once again congratulations to Currawong, Dangar Island, New Farm Road, Northumberland / Gluek, and Wareemba Avenue / Brown.

To read their stories, see the previous Bushcare enews letters:

www.hornsby.nsw.gov.au/environment/flora-andfauna/bushland-management/bushcare/bushcarenews

We also had seven other groups receive recognition awards:

15 Years of Service

Hunt Reserve (Mount Colah)

Hunt Reserve was named after John Charles Hunt from Dural, orchardist and first elected President of the Hornsby Shire Council in 1906. The Reserve became an unofficial dump ground until 2002 when locals established the Hunt Reserve Bushcare group following a hazard reduction burn.

Current group leader Julie King has been an active member since 2006. She has a keen interest in native plants and also volunteers at the Ku-ring-gai Wildflower Garden. Helen Smith has been an active member since 2011 and her expert spider knowledge has been much appreciated in her presentations to Hornsby Bushcare volunteers. The third volunteer, Rosemary Cacitti, started with the group in 2017. Rosemary is enthusiastic about continuing the restoration of the bushland within Hunt Reserve. The good core has been preserved, and perimeter weeds and garden escapes are being successfully managed.

14 Years of Service

Lisgar Road (Hornsby)

Lisgar Road is a narrow site connecting two roads with pedestrian access. It contains minimal remnant vegetation, steep unstable creek banks, and powerlines that limit plant height.

The site owes its existence to Dot Babb who singlehandedly kept the site going over many years. Recently new members have come on board and she's over the moon! Afternoon teas are dynamic and full of discussion about human rights, multiculturalism, Dot's connection with the local Aborigines and so on. Dot makes Anzac biscuits to include all the dietary requirements for our group. She is a wonderfully benevolent Bushcarer!

The group are attempting to rival Lisgar Gardens with bushland beauty for pedestrians to enjoy when they walk through the site. However they're in a tussle with the Brush Turkeys and the local, free roaming chooks who threaten their new plants.

13 Years of Service

Landra Steps (Mount Colah)

Judi Choat is the group leader for Landra Steps and she has been there since inception in 2005! She is also a member of the Rofe Park group. She has extensive plant and bird knowledge and her native garden is fantastic!!

Judy is always willing to go the extra mile for the site. During the dry spell she dragged litres upon litres of water uphill to give the plants a drink, and as if to say "thank you," every one of the plants survived!!

It's a tiny little site but with brilliant diversity. Recently a kingfisher family nested in an old termite nest in a dead tree. The group enjoy wonderful morning teas using chairs and tables from clean ups in the area, sitting under a shady Pittosporum on hot summer days. They love learning about caring for the local bush, and growing native plants in their gardens, which is what inspired them to join Bushcare.

Berowra Waters Ferry

The area has been a tourist spot since 1914 when the boatshed was built. The Great North Walk is now running through it. The area is used by picnickers, bushwalkers, tourists, fishermen, boat users.

Local resident Helen Wilson initiated the group forming in August 2005. She wanted to clear away the overgrown vegetation around the picnic table and reduce the rubbish left on site by residents and tourists.

After a Clean Up Australia Day event Lia Reith and Tess Ewart became regular members of the group. Over time as weeds were successfully controlled, they expanded the site boundaries to include tackling Cats Claw Creeper on a very steep slope.

Helen has recently moved "off the river" to live with her daughter and family "up the hill". She is very sad to no longer be involved with Bushcare on the river - although she is looking for other sites close to her new home. Lia and Tess have also had to pull back. Amazingly, three enthusiastic and eager new volunteers have just started so BWF soldiers on.

Annual award winners

12 Years of Service

Morgan Street (Thornleigh)

Morgan Street Bushcare site was once known as "Elouera Bushland Natural Park" and has quite a chequered past. There is evidence it was an Aboriginal campsite before it was used as a camp site for quarry workers. Remnant tracks indicate the quarry zigzag railway ran through the site. For a time before the area was subdivided for housing it was a slaughter yard.

Tony Monteleone has been working there since the group started. He faced towering privets, tangles of blackberry and the usual persistent riparian weeds of aceotosa, Crofton Weed and Trad. He was later joined by equally dedicated volunteers Jarrod Amoore and Tanya Bolesic. Together they have transformed this pocket of degraded bushland into a wonderful meadow with diverse native ground covers, shrubs and a graceful canopy. The site provides a sanctuary for bushwalkers entering the Benowie Walking Track in the Berowra Valley National Park, and gateway to the Great North Walk. A fantastic achievement!

Manor Road (Hornsby)

The site contains a steep pedestrian entranceway into the Berowra end of the Great North Walk. Weeds near the road end – including the dreaded Mother of Millions threatened to spill down into the park below. These came to the attention of nearby resident and professional bush regenerator, Lyn Springett.

Lyn took the site on and worked there with little support until Council decreed she could not work there alone.

She recruited another bush regenerating neighbour, Paula Ellis, to help. Lyn and Paula have since become a formidable duo. They both volunteer on at least three other sites in the Shire, and they are often to be found on the Floating Landcare barge, which takes groups to water access only sites for strategic weeding.

Hampden Road (Pennant Hills)

Hampden Road bushcare started in 2006 with Fran Easy and Carrie Moran, two residents who were interested in reducing the weed biomass which mostly consisted of vines and woody weeds. Over time that reduced to herbaceous weeds and now after massively reducing the ehrharta seed bank (yes it can be done!) we have been able to spread further out from the original boundaries for more woody weeds and vines. Hampden Road has regrettably seen a big loss of long time Bushcare members whose life outside of Bushcare, whether it be family or studies, has demanded more of their time. It dwindled to one, Sue Patterson who has been with the site since 2013. She has a property on the opposite side of the Britannia St bushland and has a lovely bushwalk en route to Bushcare. She loves permaculture and has erected vegepods on her otherwise sandstone slope so she can get the pleasure of eating from her own garden. She is involved in the native bee hive splitting at Ku-ring-gai Council and a travelling permaculture group that go to each other's property to work on projects as a team. She also has a great love of worms. The group has slowly grown in numbers, welcoming Brendan Conolly on board and more recently Eileen Lees (who is an existing member at the Duneba site in Westleigh), and Patrick & Ardyce Harris. We look forward to what this new look team can achieve in this beautiful patch of bushland.

Nursery Volunteer of the Year Award

The 2018 nursery volunteer of the year award was Nyree Miller.

Nyree received this award for her valuable contribution to the community nursery program. By no means has this decision been biased by her excellent and regular homemade chocolate provisions for morning tea.

It is entirely due to her fantastic input into production, her enthusiasm, her great sense of humour and for being a real team player.

The Golden Trowel

The 2018 Golden Trowel award went to Currawong Road Bushcare Group for working well beyond the boundaries of their site and inspiring others in the community at Lyrebird Gully. Most of the work was carried out by two staunch Bushcare members, Rae and the late Noel Rosten. Lyrebird Gully in Mt Kuring-gai was one of those places where weeds outnumbered natives but the Rostens helped to change that. They worked with National Parks staff and with students from Asquith Boys High School to transform the bushland, and would often do a few extra hours here and there to tackle the weeds before they set seed. Both Noel and Rae were supportive of students and inspired them to learn about their local bush. We in Council look forward to building on their work in 2019. In the meantime the lyrebirds seem to be more abundant, now the weeds have disappeared and been replaced by regenerating bushland.

Special Thanks

Photography Services

Ron Watts allowed himself to be volunteered (yet again) to being the official photographer for the event. This is a valuable role providing a visual record of the proceedings. Ron is a highly skilled photographer whose work regularly appears in our annual Beautiful Bushland Photo competition. We are honoured that he has again lent his services to us today.

Our Speakers

We would like to thank Meron Wilson, Bushcare Trainer, for presenting the trivia questions. You had us in the palm of your hand, waiting expectantly for answers. The light hearted way you involved the audience in the adjudication was refreshing and amusing. You will be top of the list when we do another bushcare trivia session.

We would also like to thank Dr Peter Coad, Manager – Natural Resources. Peter did a great job acknowledging the work Council staff and volunteers do for the natural environment.

Finally I would like to thank Cllr Robert Browne for presenting the volunteers with their awards. Robert Browne has been a regular at our Christmas celebrations and really enjoys celebrating the milestones of each group.

We look forward to seeing you at the 2019 Christmas party where we will celebrate 30 years of Bushcare.



The 2019 Bushcare Competitions

Terms and Conditions

Open to Bushcare and Nursery volunteers only

- Submissions need to include the photographer's name, title of the photo and volunteer group. Photos are to be at least 300dpi (resolution) or 1200 pixels width/ height. Maximum of three entries per person per category.
- Closing date for 2019 competition: Monday 2 September 2019.
- Viewing will be from 24 September until 17 October at Hornsby Library, voting is open to the general public, one vote per person. Winners will be awarded by popular vote and announced at the Christmas Party. The judge's decision is final.
- A selection of the photos will be published in the 2020 Bushcare Calendar.
- Should a child be clearly identifiable within a photo, consent of the parent or guardian via a photo release form is required. Photo release forms are available upon request.
- Please direct any questions to Leanne Johnston on 9847 6362 or bushcare@horsnby.nsw.gov.au

There are two categories in the 2019 competition, maximum of three entries per person per category:

- The main event: Hornsby Our Beautiful Bushland – the celebration of our environment. Photos must be taken in 2019 within Hornsby Shire and related to local plants and animals.
- Native trees of Hornsby Shire to celebrate Council's program to plant 25,000 trees by 2020.

Photo competition

he winner of the 2018 My Beautiful Bushcare Photo competition was Noel Rosten's Orchid Dupe Wasp (*Lissopimpla excelsa*) on Bonnet Orchid (*Cryptostylis erecta*). The photo was submitted posthumously. Noel died tragically in February 2018 however was already working on his photos for the annual bushcare photo competition.

David Hooper, another of our award winning photographers, came in second and third with his photos, Back off Buster and Proud to be Free. In addition, his photo Lesser Long-eared Bat *(Nyctophilus geoffroyi)* ranked number 10.

Marie Kobler submitted some great photos - first time entries too! Her great small bird photos, Spotted Pardalote jnr. Strikes a Pose and Aye, Aye Silvereyes were ranked fourth and fifth. We are really looking forward to your entries for 2019.

Petra Holland also had a very good year taking photos with three photos making it to the exhibition: Parasol Mushroom, Crosslands (incidentally the cover of the 2019 Bushcare calendar) and Katydid Nymph on a Waratah was 14th.

Kookaburras were popular with the voters. Lindsay Warton's Waiting for the Postman came in 9th place and Frances Brown's Kookaburra on the Clothesline was 16th.

Other worthy winners were Richard Shields (in 6th place) for his Yellow Admiral Butterfly; Bronwyn Dobeson for her photo of the Glossy Black Cockatoo (top 10); Ted Angelo for his Sandbrook Inlet photo (13th place); and Danny Burkhardt for his Green Scarab Beetle (15th place).

Thank you to everyone who submitted photographs. We use your photographs to promote our programs, in the newsletters and on our website. Without your submissions we could never produce our calendar.



Noel Rosten's Orchid Dupe Wasp (Lissopimpla excelsa) on Bonnet Orchid (Cryptostylis erecta)



David Hooper Back off Buster



David Hooper Proud to be Free



Marie Kobler Spotted Pardalote jnr. Strikes a Pose



Marie Kobler Aye, Aye Silvereyes



Petra Holland Katydid Nymph on a Waratah



Petra Holland Parasol Mushroom



Frances Brown Kookaburra on the Clothesline

Photo competition



Lindsay Warton Waiting for the Postman



Bronwyn Dobeson Glossy Black Cockatoo



Richard Shields Yellow Admiral Butterfly



Ted Angelo Sandbrook Inlet



Danny Burkhardt Green Scarab Beetle

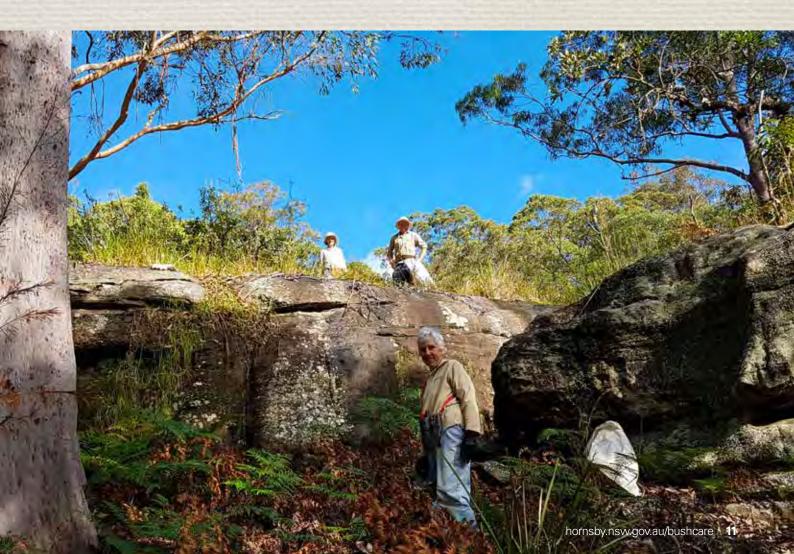
Persoonia mollis subsp. maxima

The Persoonia mollis subsp. maxima monitoring project has now officially entered its second year of funding. The grant money is allocated through the Saving our Species program, which is administered by the Office of Environment and Heritage NSW (OEH). The program aims at securing the future of as many of the 1,000 threatened species in the wild in NSW as possible.

Last year's initial weed control and mapping exercise was well received by OEH. Contractors started their first visit for 2019 in early February. All 58 specimens previously recorded last year (bar two) were accounted for and look healthy with most displaying new growth. To add icing to the cake, 2 healthy specimens previously missed are now "discovered".

Through this project, the Bushcare team is also strengthening their partnership with both OEH and the University of Western Sydney. OEH Project Officer Meg Hinds visited the site and assisted with Persoonia mollis subsp. maxima recording before the ecological burn in August 2012. Dr Paul Rymer (Senior Lecturer in Ecological Genetics - Hawkesbury Institute for the Environment -Western Sydney University) has shown interest in the project. Paul's current field of research focuses on the effects of drought and climate change on the Persoonia genus.

Contractors are continuing to work on the containment of mostly Whiskey Grass and Crofton Weed and any other invasive species likely to compromise the recovery of the site. This will be achieved in a concerted effort with our dedicated Binya Close Bushcare volunteers.



Our 25,000Trees by 2020 Project

n July 2018 Council committed to replenishing lost tree canopy cover with the 25,000 Trees by 2020 tree planting program.

It is the first step to ensuring our Bushland Shire remains bushy.

To achieve our target, Council's Natural Resources and Parks teams and volunteers are working together to tackle three main project outcomes:

- Production & planting of street trees
- Community & park plantings
- Supply of free trees to residential properties

In 2019 we plan to get 3,700 new trees in our streets, 2,000 trees in parks and 7,000 trees in bushland reserves. Community plantings undertaken in 2018 at Rofe Park, Ginger Meggs Park, Kenley Park & Greenway Park are all doing well. As you know there are so many good reasons to plant trees.... so can I ask a favour of the converted?

Spread the word about the program to your neighbours, family, friends, schools or social group. We can make it so much more successful with community support!

More information about getting involved or the next planting event date can be found at <u>trees.hornsby.nsw.gov.au</u>

We are toying with the idea of a Treecare group...

If you are interested or would like more information about the tree program please send me an email <u>dfitton@hornsby.nsw.gov.au</u>

Happy Planting

Donna Fitton Tree Care Project Officer



PARKS

E STREETS





More trees? Who's going to do all that potting?

ue to the increased work load and demand on the community nursery to provide for the 25,000 trees by 2020 project we have had to engage more staff to assist.

Recently we even had Council's entire senior management team put in a few hours at the nursery undertaking everything from seed sowing through to tubing up seedlings and then potting on tubestock (for future street trees) into 7.5 litre anti-root spiralling pots.

To date, at the time of writing, we have now potted on 3500 advanced trees in our new purpose built stand out areas within the recently expanded nursery footprint.

There is a fantastic mix of high quality stock represented by 29 species.

The value of trees

rban forests provide over \$500 million worth of services each year for the world's largest cities—and there's plenty of room to plant more trees. Urban forests play a vital economic role in cities and provide multiple benefits. The trees that line our streets, gardens, parks and reserves do so much more than simply make our neighbourhoods attractive. Urban trees are known to:

- Reduce heating and cooling costs in buildings
- Remove air pollution
- Manage storm water runoff
- Sequester carbon
- Enhance the beauty of our neighbourhoods
- Provide habitat for native wildlife

Dependent on their location, trees are part of complex ecosystems capable of providing a wide range of economic, social and environmental benefits. Urban trees cool cities, conserve energy, reduce runoff and absorb pollutants. If trees did not perform these functions then we would need to build infrastructure to carry out these basic necessities.

Strategically placed trees reduce energy use by shading buildings during summer and slowing down winds in winter. When deciding where to plant trees for shade, take a look around your home. Determine which windows and walls receive the most sunlight. Trees shading western walls provide the highest reductions in cooling costs. It is advisable to shade both west and east facing areas, as these walls will receive about 50% more sunlight during the warm months than north and south facing walls. Deciduous trees on the north, east, and west sides of your home will provide cooling shade in the summer and warmth from the sun when they lose their leaves in the winter. Generally trees reduce ambient temperatures in the home by 2°C. Reductions in temperature of up to 10°C can be achieved by planting tall canopy trees shading your roof.

Did you know 65% of heat generated by full sunlight on a tree is dissipated by active evaporation from leaf surfaces?

Around the world, neighbourhoods with lots of trees command higher prices that those without. Large old street trees were found to be the most important indicator of attractiveness in a community and can screen undesirable sightlines. Sitting in the shade under a tree brings neighbours together and promotes a healthier, less stressed, and greater sense of community. Studies have shown that hospital patients with natural views from their rooms have significantly shorter stays, less need for pain relief medicine and fewer post-operative complications. People generally prefer social interactions in calming, beautiful and nature-dominated areas. Trees and people are psychologically linked by culture, socialisation and co-adaptive history. Trees provide "white noise" - the noise of the leaves and branches in the wind and associated natural sounds that mask other man-made sounds. In short, people feel happier around trees.

Trees provide habitat for our native animals

Habitat trees provide many resources for wildlife, including:

- Cracks, crevices, notches and hollows that provide breeding sites, shelter, refuge and living quarters for a wide range of wildlife species.
- Nesting sites in high branches for birds especially raptors.
- Dead branches above the canopy are utilised by some birds for roosting, sunning, preening and to watch for prey.
- A regular and plentiful seasonal food supply such as nectar, pollen, exudate (sap), fruit, seeds, leaves, wood and leaf litter for animals of many kinds.

By virtue of their size, old trees provide more food and nesting resources than younger trees. An animal can therefore forage more profitably on a single large tree than on ten smaller trees -at the same time decreasing the risk of predation by not having to travel from one tree to the next.

Mature canopy trees and the animals that depend on them are fast disappearing, as only old large trees have hollows. Hollow formation is dependent on the history, species and location of the tree. Natural tree hollows are often essential habitat for many wildlife species. They provide refuge from the weather and predators, and safe sites for roosting and breeding. Destroying living or dead hollow-bearing trees displaces or kills wildlife dependant on those hollows. Replacing100 or more years of growth, maturity and decay is impossible.. As trees age over time, they are subject to various natural forces such as wind, heat, fire, lightning, rain and attack from insects such as termites and beetles, fungi, bacteria and so on. Generally, small hollows with narrow entrances suitable for small animals, such as the eastern pygmy-possum (Cercartetus nanus), take about 100 years or more to form. Hollows of

a medium size and suitable for animals such as parrots will take around 200 years to form, and the larger and deeper hollows occupied by glossy black cockatoos (Calyptorhynchus lathami) and other larger animals such as powerful owls (Ninox strenua) can take a lot longer. In NSW, at least 46 mammals, 81 birds, 31 reptiles and 16 frogs depend on tree hollows for foraging, shelter, roosting and nesting. They include bats, possums, gliders, owls, parrots, antechinus, treecreepers and robins as well as numerous species of snakes, frogs and skinks.

Trees conserve energy, reduce carbon dioxide in the atmosphere, improve air quality, reduce storm water runoff, and enhance the beauty of our communities by adding colour, texture and form. They provide homes for our native wildlife and provide us with areas for naturebased recreation. Hornsby Shire Council wants our community to have access to all these benefits. We are planting 25,000 trees by 2020. You can help! You can request a street tree for your street, pick up a tree for your garden or help council plant trees in our parks and reserves. To find out more go to

trees.hornsby.nsw.gov.au

Nursery Upgrades

Thanks to the huge 25000 trees by 2020 project the nursery has been upgraded and renewed to accommodate the scope and capacity required of this project.

We have installed a new insulated potting shed (now at a comfortable height compared to the previous diminutive shelter!). It has lovely clear panels for natural lighting along with solar powered LED lighting. There is also new stainless steel benching for storage and outside administration.

The 50 year old glasshouse was finally removed and replaced with a modern steel framed plastic clad tunnel house. This has computer controlled wind up ventilated sides, new benching, heated propagation matting and we were even able to recycle our much loved mist system back into the new house with an upgraded delivery system via 44 overhead misters.

Two new stand out terraces for the production of advanced stock totalling 400 square metres in area. Each terrace has a 2% fall with full water recapture thanks to an impervious liner and direct drainage plumbing back to our water tanks. The two terraces are divided by beautiful sandstone 'logs' and all this work was completed by internal staff!

A new irrigation system on the

aforementioned stand out terraces also meant an irrigation computer upgrade as the old one did not have any capacity to run more stations. A bonus with the new computer is that it is Wi-Fi ready, this meant we were able to buy an app for smart phones and bingo- the entire nursery irrigation system can now be controlled from anywhere off site!

And almost best of all, all the hodgepodge fencing within and around the interior of the community nursery was all removed (and recycled) to make way for one single perimeter fence. The nursery now flows so well for improved access and moving stock around.





Liveable Cities

ur cities are getting hotter, floods are on the increase and we are losing the majestic old trees from our gardens, reserves and streets. Many of these changes are creating an urban heat island, where the cities we are building actually increase the temperature of the environment. In short we are creating cities that adversely impact on our health and social wellbeing. It is predicted in the next 20 years 50°C summer heatwaves could be the new norm for Sydney particularly with the development proposed in the greater Sydney Basin and the new airport. Our cities need to reduce average temperatures; presently the urban heat island increases the average temperature by 4°C. We need to start thinking about what actually makes a city a great place to live. The ways in which we manage our roads, roofs, footpaths and trees in parks, gardens and reserves all link with how we make our cities liveable. Specifically we manage our sun and rain.

In the last 10 years there has been a dramatic change in our neighbourhoods. Hornsby Shire has undergone a massive amount of infill development. Where once there was a modest house on a quarter acre block with a couple of mature gum trees in the lush green garden we now see multi story dwellings with huge expanses of dark roofs, less green spaces, more hard impervious surfaces with a preference for dark colours, replacing old tall trees and rambling gardens will a collection of lilly pillies, crepe myrtles and box hedges.

Dark surfaces make cities hotter than they need to be. Dark surfaces absorb heat in the daylight and release heat at night. There are a number of ways we could reduce this effect. We could use light coloured or reflecting roofing materials. We could plant trees that shade the roof and to naturally cool the air through transpiration. We can install solar panels on the roof to create a thermal barrier between the sun and roof. In addition to cooling our homes, the above measures will increase the longevity of our roofing materials. The constant heating and cooling of a roof causes it to expand and contract, causing wear and tear on the materials. Cooler roofs are generally more durable. Our roads have a massive impact on the urban heat island effect. Like the dark tiles on our buildings, roads also store heat from the sun in the daylight and release the heat at night. Additionally our roads are designed to shed water quickly into the stormwater drains and gutters, away from the built environment and into the natural water systems. The management of this system is expensive to install and creates a massive burden on our natural water ways and native vegetation. This design places an enormous amount of stress on our natural environment. As our cities get bigger, our roads wider and the natural areas smaller the creeks can no longer cope with the increased volume and velocity of water during storm events. This system also delivers pollutants such as oil, plastics and heavy metals into our creeks and waterways. It is time we developed a new strategy. Smarter city design would include more porous surfaces, for example road edges, driveways and hard landscaping could be made porous to allow water to better percolate into the groundwater and as a result reduce our need for stormwater collection infrastructure.

If we are unable or unwilling to make changes to our environment to manage the sun and heat we will rely more and more on electricity and fossil fuels. Our buildings will become increasingly reliant on airconditioning to moderate temperatures. The airconditioning units will be pumping hot air into an already heated environment requiring even more energy to cool the home. Instead of relying on fossil fuels we could install solar photovoltaic (PV) cells on rooftops to turn sunlight into electricity. PV cells also protect the roof from sunlight and therefore heat absorption.

Smart cities have smart surfaces, surfaces that reduce heat, reduce flood and improve liveability. Council is developing strategies to manage these challenges. The following Strategy documents will soon be available for public comment: Biodiversity Conservation Strategy, Urban Forest Strategy, Urban Heat Strategy, Water Sensitive Cities Strategy, Environmental Sustainability Strategy, and Climate Adaption Strategy.

We invite your input to help make the Bushland Shire more liveable for all.



Eucalyptus workshop:

he Eucalyptus workshop was offered again after a seven year hiatus. The workshop generated a lot of interest. Bookings were closed after only just a few hours! Not surprising when Community Nursery Coordinator Ross Rapmund offers to share his vast knowledge on the plants and the broader ecology of our Shire. This time, it was all about Eucalyptus, Angophora, Corymbia and Syncarpia genera.

Our group of 16 Bushcare volunteers embarked on a bushwalk along the Mambara track, opposite the Community Nursery. Ross talked about the importance of mature trees in the landscape. He also mentioned the roles that geology, soils and topography play in the distribution of the 36 species of Eucalypts recorded in the Hornsby Shire.

The area we walked through provides a condensed snapshot of the different landforms and soil compositions present across Hornsby Shire. We started by looking at a distinctive patch dominated by Angophora hispida (Dwarf Apple), growing on traditionally shallow, nutrient poor and porous soils. The Dwarf Apple (Angophora hispida) develops a larger seed than Angophoras on fertile soil, this larger size give the seed greater resources at germination to survive the infertile sandy soil. Only a short walk away, we found ourselves in a different situation where mature, tall (above 15m) *Eucalyptus pilularis* (Blackbutt), *Angophora costata* (Sydney Red Gum) and *Corymbia gummifera* (Red Bloodwood) were the dominant canopy species. The presence of those species was a clear indicator of the presence of a shale influence from higher in the topography. This creates a transition soil type.

We then continued on towards the top of the ridge around Pennant Hills Oval and observed the presence of remnant *Eucalyptus saligna* (Sydney Blue Gum), *Syncarpia glomulifera* (Turpentine) and *Angophora floribunda* (Rough-barked Apple) thriving in richer, deeper soils derived from the Wianamatta Group geology.

This extremely informative and popular workshop will be on offer next summer.



Seniors Week

hanks you to all the great volunteers who helped out at Council's combined Bushcare, 25,000 tree planting and Community Nursery stall in February 2019.

The morning had a great atmosphere, there were so many people interested in our programs, planting trees, looking after local bushland and really interested in improving their environment.

Verne Mantova, Louise Rowston, Jon Stanley, Xian Zeng were great community advocates. Thank you for your time, enthusiasm and commitment to our programs.

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Council Stall Volunteers **BUSHCARE NEWS**

Protect what we fore ...



Have you seen a red-eared slider turtle?



Red-eared slider turtles:

- Are listed in the world's 100 most invasive species
- Originally come from the USA and don't belong in Australia
- Can take hold of new areas quickly, outcompeting native species
- Spread disease which could devastate our native wildlife
- Eat threatened plants, fish and insects

If you have a red-eared slider turtle:

Protect our precious environment and do not release it into a creek, river or park pond.

Please contact us to arrange for it to be handed in safely. Call 02 6391 3525 or email **invasive.species@dpi.nsw.gov.au**

If you have seen or caught a red-eared slider turtle:

- Take a photo (if you can)
- Record your location
- Let us know by using our online reporting form www.dpi.nsw.gov.au/biosecurity/sighting



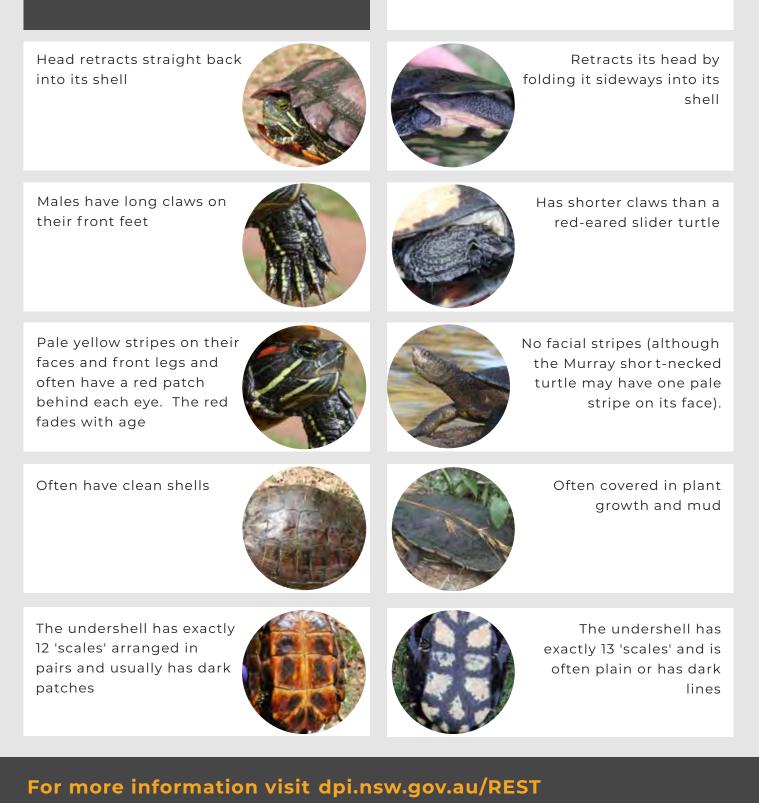
Department of Primary Industries

Spotting a red-eared slider turtle



Red-eared slider turtle:

Native turtle:



The storm cloud with a silver lining

n 15th December 2018, a number of our bushland reserves between Beecroft and Galston were left in a state of devastation following a particularly destructive storm event. Cyclonic type winds hurtled in a direct line stripping limbs and ripping out the canopy of trees in its path within minutes. Trees laden with ripening fruit after a prime growing season could not match the strength of the unprecedented winds and dropped their fruiting bundles way too early.

The Natural Resources team hit the ground running equipped with seed collecting gear to salvage as much seed as possible knowing that once on the ground, capsules would soon open and seed would fall.

The result was we collected 200 grams of Sydney Blue Gum seed from 33 individuals thus providing a strong genetically diverse collection for our seed bank and enough seed to produce 50,000 new trees. Additional tree seeds collected included Blackbutt, Grey Gum and Ironbark.

Council's Community Nursery has already germinated batches of the seed and these will soon be ready for replacement planting as part of the 25,000 trees by 2020 project. The general community has responded with support for replacement planting and Council is pleased we are able to provide the progeny from some of our sadly lost iconic trees for future generations. While the vision of our natural areas strewn with fallen trees is still fresh in our minds, we can now see a glimmer of hope, a silver lining, as young saplings reach for the light to replace lives lost.



New Farm Road Bushland, West Pennant Hills



Seed from 33 Sydney Blue Gum trees

Kids into bushland 8 easy, short & accessible bushwalks

These trails are accessible to young children, strollers, wheelchairs, those with mobility restrictions, and people unused to bushwalking. The routes are short, level and clearly defined, with well-formed surfaces, and generally located close to vehicle parking and amenities.

Mangrove Boardwalk, Brooklyn

240 m / 10 mins (return)

This tranquil and easy trail follows a concrete path past the Brooklyn War Memorial before a constructed boardwalk leads through endangered Swamp Mahogany Forest and Mangrove Swamp. It ends at a fenced viewing platform with a peaceful Sandbrook Inlet water outlook. Parking: Street parking (opp. 106 Brooklyn Public School)

Starting Point: Brooklyn Rd (opp. 106 Brooklyn Public School)

Drinking Water: Nearby

Public Toilet: Nearby

Picnic table: Nearby

BBQ: Nearby

Play equipment: Nearby

Dog walking: Must be on lead More Information: Hornsby Shire Council

Tel: 02 9847 6666 Email: hsc@hornsby.nsw.gov.au Website: hornsby.nsw.gov.au



Mambara Trail, Pennant Hills 717 m / 25 mins (circuit)

This circuit trail is accessible to everyone. A concrete path winds through Blackbutt Gully Forest and interpretive signs provide information on the local ecology. It is a safe and easy introduction to exploring the local bushland.

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Parking: Street parking (opp. Community Nursery, 28 Britannia St); carpark (Ern Holmes Oval)

Starting Point: opp. Cottage at Community Nursery, 28 Britannia St

Drinking Water: Nearby Public Toilet: Nearby

Picnic table: Nearby BBQ: No

Play equipment: Nearby

Dog walking: Must be on lead More Information: Hornsby Shire Council

Tel: 02 9847 6666 Email: hsc@hornsby.nsw.gov.au Website: hornsby.nsw.gov.au



One Tree Reach Wetland, Laughtondale

280 m / 10 mins (return) This peaceful trail is perfect for bird-lovers! A gently graded crushed sandstone path and constructed boardwalk passes through restored Swamp Mahogany Forest and Floodplain Paperbark Scrub, both endangered ecological communities. The trail ends at a viewing platform overlooking the beautiful One Tree Reach Wetland. A 1 km crushed sandstone branching trail with interpretive signs winds through the forest, ending at a picnic table. Parking: Carpark (901 Singleton Road) Starting Point: At carpark Drinking Water: No Public Toilet: No Picnic table: Nearby BBQ: No Play equipment: No Dog walking: Must be on lead More Information: Hornsby Shire Council Tel: 02 9847 6666 Email: hsc@hornsby.nsw.gov.au Website: hornsby.nsw.gov.au



Crosslands Boardwalk, Hornsby Heights 980 m / 30 mins (return)

This easy and pleasant trail follows a section of the Great North Walk initially along a sealed path through the Crosslands Reserve picnic area. Timber boardwalk and a firm dirt trail then pass through Swamp Oak Floodplain Forest, Mangrove Swamp, and Coastal Saltmarsh communities. The trail reaches a lovely timber viewing platform looking across Berowra Creek. Interpretive signs provide interesting information about the local ecology. The Great North Walk continues on; however the trail is less easily accessible.

Kids into bushland 8 easy, short & accessible bushwalks

Parking: Northern end of the Crosslands Reserve carpark (enter at the end of Somerville Road – gates open 8 AM – 7:30 PM during daylight savings and 5 PM rest of the year)

Starting Point: Northern end of carpark

Drinking Water: Yes

Public Toilet: Yes

Picnic table: Yes

BBQ: Nearby

Play equipment: Nearby

Dog walking: No pets allowed More Information:

Hornsby Shire Council

Tel: 02 9847 6666 Email: hsc@hornsby.nsw.gov.au Website: hornsby.nsw.gov.au

Barnetts Lookout, Berowra Heights

420 m / 15 mins (return)

This pleasant and easy trail follows a concrete path through a picnic area surrounded by Narrow-leaved Scribbly Gum Woodland. It ends at a fenced lookout with amazing bushland and creek views up and down Berowra Valley. A great trail for anyone wishing to be inspired by the local bushland.

Parking: Carpark (opp. 66 Barnetts Road)

Starting Point: At carpark

Drinking Water: Yes

Public Toilet: No

Picnic table: Yes

BBQ: No

Play equipment: Yes

Dog walking: No pets allowed

More Information:

NSW National Parks and Wildlife Service

Tel: 02 9472 8949 Email:bobbin.head@environment. nsw.gov.au

Website: nationalparks.nsw.gov.au

Kalkari Discovery Trail, Mount Colah

Data Ada a

800 m / 25 mins (circuit)

Wander through the interesting Kalkari Discovery Centre (staffed by helpful volunteers), before following a concrete path past interpretive signs, a lovely pond, and a viewing platform with a stunning outlook over the Cockle Creek valley. Keep an eye out for wallabies, bush turkeys, ducks and other local residents. This is a great trail to learn local plant names as many species are labelled.

Parking: Kalkari Discovery Centre, Ku-ring-gai Chase National Park (park entry fees apply; opening times

9am–5pm daily, closed on Christmas Day)

Starting Point: Kalkari Discovery Centre

Drinking Water: Yes

Public Toilet: Yes

Picnic table: Nearby

BBQ: No

Play equipment: No

Dog walking: No pets allowed

More Information:

NSW National Parks and Wildlife Service

Tel: 02 9472 8949 Email: bobbin.head@environment. nsw.gov.au

Website: nationalparks.nsw.gov.au

Bobbin Head Boardwalk, Mount Colah

550 m / 20 mins (return)

A short, pretty walk that can be enjoyed by everyone, it makes a nice addition to a picnic or paddle at Bobbin Head. Enjoy great views of Cockle Creek from a suspension bridge, before meandering along a boardwalk through the mangroves. Interpretive signs inform about the local ecology and there are plenty of opportunities to see crabs up close.

Parking: Car park at the southern end of the Bobbin Head, Ku-ring-gai

Chase National Park (park entry fees apply) Starting Point: Car park at the southern end of Bobbin Head Drinking Water: Nearby Public Toilet: Nearby Picnic table: Nearby **BBQ:** Nearby Play equipment: Nearby Dog walking: No pets allowed More Information: NSW National Parks and Wildlife Service Tel: 02 9472 8949 Email: bobbin.head@environment. nsw.gov.au Website: nationalparks.nsw.gov.au

Sensory Trail, West Pennant Hills

350 m / 15 mins (circuit)

This trail is perfect for little legs, prams or wheelchairs. It has a flat, compacted dirt trail surface with interpretive signs every 20 metres encouraging walkers to experience the forest and its wonders with all their senses. Braille books are also available on site by prior arrangement and audio can be downloaded.

Parking: Cumberland State Forest visitor carpark (95 Castle Hill Rd, West Pennant Hills)

Starting Point: Near carpark

Drinking Water: Yes

Public Toilet: Yes

Picnic table: Nearby

BBQ: Nearby

Play equipment: No

Dog walking: Must be on lead

More Information:

Forestry Corporation of NSW

Tel: 1300 655 687 Email: info@fcnsw.com.au Website: forestrycorporation.com.au

Events

Exhibition: 2018 Photo Competition Winners

This is your chance to view the winners of the 2018 My Beautiful Bushland photo competition.

When

9 April -30 April (library opening hours only)

Where

Pennant Hills Library, Corner Ramsay and Yarrara Roads, Pennant Hills

Bushcode Workshop

There are four scheduled Bushcode workshops for 2019.

The Bushcode Workshop is a compulsory training workshop for all Hornsby Shire Bushcare volunteers. This workshop covers the work health safety component of your induction into the Bushcare program. It is a great opportunity to visit the community nursery and learn how the volunteer program works within Hornsby Shire Council.

When

Saturday 22 June, Saturday 3 August, Saturday 23 November, 9am-1pm

Where

Hornsby Community Nursery, 28 Britannia Street, Pennant Hills

Bookings essential:

Bookings for all the Bushcode workshops are through the online booking service: trybooking.com/ZUXG

Native Plant Giveaway - Ward B

Residents from Ward B are invited to come along and choose four free native plants for their gardens plus a tree if you have the space. Staff and volunteers will be on hand to assist you to choose plants and answer queries. Please bring your current Hornsby Shire rates notice and ID.

Limited stock available on the day and very limited parking at the venue.

When

Sunday 30 June, 10am-12pm

Where

Community Nursery, 28 Britannia Street, Pennant Hills

Exhibition: 2018 Photo Competition Winners

This is your chance to view the winners of the 2018 My Beautiful Bushland photo competition.

Please note you need to book into most events, and numbers are limited. If you don't book the event may be cancelled.

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When

1 July – 22 July (library opening hours only)

Where

Hornsby Library, 28-44 George Street, Hornsby

Kids build a native bee hotel workshop

This dynamic workshop features a vibrant, awe-inspiring presentation, interactive display and each child will make a native bee hotel. Suitable for children 5-12 years.

Please note this activity is for Hornsby Shire residents only and there are no refunds.

When

Monday 8 July, 10am-11.30am

Where

Hornsby Community Nursery, 28 Britannia Street, Pennant Hills

Cost: \$5.00 per child (non-refundable)

Bookings Essential:

open 9am 11 June. Use our online booking service at hornsby.nsw.gov. au/whatson

Bushwalk for volunteers – Whale Rock

This interesting walk provides a variety of rich flora and fauna and crosses Byles Creek and Devlins Creek . Around these areas there is abundant bird life and you can expect to see many small birds such as honeyeaters, wattlebirds, wrens and you may even spot a Powerful Owl.

When Saturday 17 August, 8.30am-12.30pm

Where

Meet at the Community Nursery, Pennant Hills

Bookings

bushcare@hornsby.nsw.gov.au or phone 9847 6362. Bookings for Hornsby Bushcare and Nursery volunteers only.

National Tree Day

Come along and plant some trees. The community nursery has been working towards getting over 1000 native plants in the ground.

When

Sunday 28 July

For more information see trees.hornsby.nsw.gov.au

Trees as Homes

Have you ever wondered if there is something living in the trees in your garden or local reserve? Abbie Mitchell is coming to talk to us about how trees make the Hornsby Shire a great place to live for our residents and our local native animals. We will learn about some of the animals that use trees as homes and some actions we can take to encourage native animals to take up residence in our beautiful trees..

When

Saturday 7 September, 11am-1pm **Where**

Hornsby Library

Bookings

hornsby.nsw.gov.au/whatson

Citizen Science Workshop

This workshop provides you with the information on how to join some popular citizen science programs. We will look at pollinators, hollows and birds as indicators of the health of your local bushland.

When

Saturday 12 October, 9am-11am **Where**

Community Nursery, 28 Britannia Street, Pennant Hills

Bookings Essential:

Email bushcare@horsnby.nsw.gov.au or phone 9847 6362. Bookings for Hornsby Bushcare and Nursery volunteers only

Native Plant Giveaway - Ward C

Residents from Ward C are invited to come along and choose four free native plants for their gardens plus a tree if you have the space. Staff and volunteers will be on hand to assist you to choose plants and answer queries. Please bring your current Hornsby Shire rates notice and ID.

Limited stock available on the day and very limited parking at the venue.

When

Sunday 20 October, 10am-12pm

Where

Community Nursery, 28 Britannia Street, Pennant Hills

Bushcare and Nursery volunteer Christmas Party When

Saturday 30 November. Details to be confirmed next newsletter.

Six triple-headed purple flags... Armistice Day Centenary waving By David Hooper

Sometimes I just want to get into the bush 'cos it clears my mind, hearing the trees whispering, birds trilling or squarking, lizards rustling in the fallen leaves or rocks with memories of eternity.

This time it was maybe 'cos I felt inspired, my camera ready, the enlightening Mini-Beasts Evening in the Bushcare Cottage still ringing in my ear - the rare chrome bright blue ant wasp or bluebottle having slipped from my fingers burrowing into the brush.

I diverge from the track, lyrebirds rooting, the elusive perfect photo of white fanned feathers yet again obscured from reach.

Then I saw it.

A tiny flash of purple. A diamond shaped 1 cm shriveled flower on a stalk from a brown furry bud sheath or spathe; a dark blue tongue-like dribble

also poking out.

I thought it was a bush orchid, David Hughes our Bushcare Trainer having said to look out for them as they are about I visited the plant daily for the next few weeks, intrigued by its reticence, determined to not miss it in bloom...excited at how it turned out.

I think it is a Patersonia longifolia...a sub-species of Purple Flag or Native Iris.

I could only find one on the internet with triple flower heads like this one... each about 6 cm across.

Plenty of pics of single three petal Purple Flags on the internet...but pics of triple-headed blooms? Not so!

On Armistice Day Centenary, 11 November 2018, six triple-headed three petal blooms burst forth at first light. And by dusk during The Last Post... ashes to ashes...dust to dust...the blooms waved for the last time, shriveled up and were gone.

Three days later two burst forth again: as single 3 petal bloom, gone by dusk. Then four days later three more as single blooms.

Let the photos tell their story.





PLEASE CONTRIBUTE TO THIS NEWSLETTER

You can send your stories or letters to the Editor for the next edition by 1 JANUARY 2020 Mail: PO Box 37, Hornsby 1630 or Email: bushcare@hornsby.nsw.gov.au This newsletter has been compiled by Hornsby Shire Council.





THE BUSHLAND SHIRE If not claimed within 7 days please return to PO Box 37 Hornsby NSW 1630