

Bushcare news

Nursery volunteers

farewells and ordering plants

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Results from four different sites

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33 volunteer groups

Tom's tassie trip

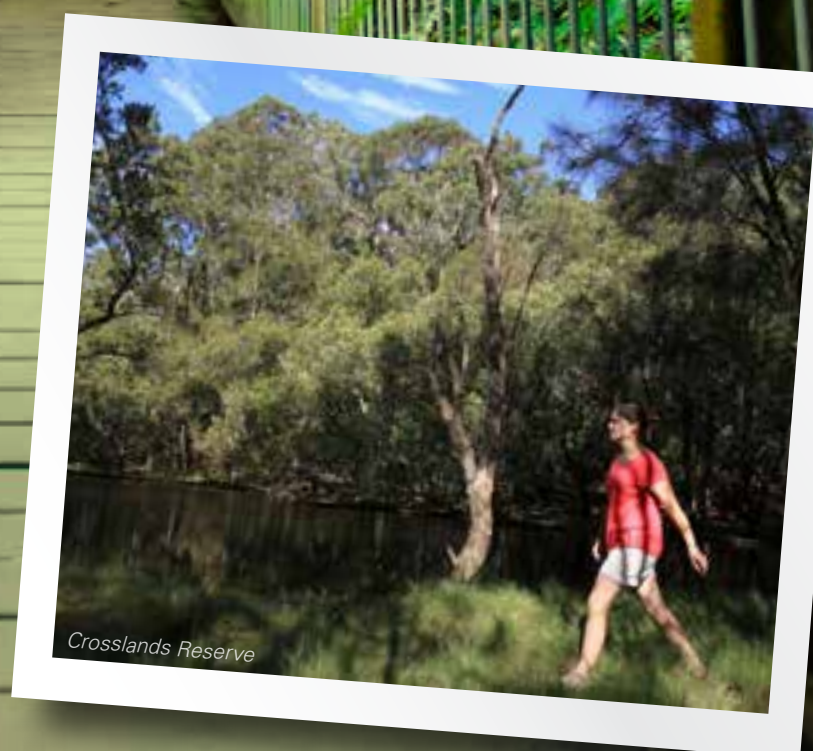
Thomas Hickman's 145km trek

Sensational spiders

Everything you wanted to know

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


 things to remember

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.

Contact Details

Hornsby Shire Bushcare Earthwise Cottage
28 Britannia Street, Pennant Hills

Mail: PO BOX 37
Hornsby NSW 1630

Email: bushcare@hornsby.nsw.gov.au

Environmental Scientist – Bushcare
Leanne Johnston 9847 6362

Bushcare Field Officer
Jean-Philippe Kecman 9847 6364

Nursery and Guided Bushwalk Program Coordinator
Ross Rapmund 9847 6361

Incident and hazard reporting
9847 4848 including outside business hours

Bushcare trainers

We are in the process of employing more trainers to fill the 2016 vacancies. Jean-Philippe (JP) may soon contact you to announce your new Bushcare Trainer. JP is also working very hard to ensure all groups are visited by a trainer, if not every month, then at least three times a year.



Natural Resources team building day

Nursery volunteers

Early 2017 saw the nursery program bidding farewell to some lovely volunteers who have moved on to chase new dreams and greener pastures.

Judy Williams has left us for granddaughter minding duties in Maitland. Judy will be missed around the potting bench with her sharp humour and wit. Good luck with securing future casual work too Judy!

Mark and Anne Greaves have moved to the lovely sub-tropical Illawarra coastline. Mark and Anne were long term volunteers who have put in countless hours of volunteering over the years. They were also highly successful in restoring several acres of endangered Turpentine Ironbark Forest at their previous residence in rural Hornsby Shire. It was through this project that they were introduced to the community nursery and became keen volunteers.

We wish them well in their new ventures.

Extra Nursery Volunteers

Currently the nursery has a large amount of pre-ordered stock due by June 30th, in fact it is the largest amount of plant material on order we have ever had to plan for and deliver. As such we have been in full swing to reach our production targets.

We have invested in extra benching and opened up more space in the grounds to production. To assist with the large orders we have also hosted two team building days at the nursery utilising our own Natural Resources Branch staff. Two work days were completed in February where we churned out 3400 plants between us all!

Grasses Workshop

There was a last minute change to the scheduled Grasses Workshop. The Grasses Workshop will now be held on Saturday 6 May, from 1.30pm-4.30pm, at Saint Benedict's Monastery, 121 Arcadia Rd, Arcadia. To book go to this link or visit trybooking.com/248462

Bushcare Photo Competition 2017

Themes for the Bushcare Photo Competitions are Hornsby, My Beautiful Bushland Shire, and Parrots of Hornsby. Parrots of Hornsby (to celebrate the Year of the Parrot). Submissions for the photo competitions close Monday 4 September. The winner will be decided by popular vote and announced at the Bushcare Christmas Party. All submissions are deemed permissible for use in the Bushcare Calendar and any other Council publication. In October there will be a parrot themed supper with a preview of the submission. Look out for more information in the July enews.

Native Plant Giveaway

This year our Native Plant Giveaways (NPG) will not be held at the nursery. We are trying to create a more festive atmosphere by partnering with other Council teams and hosting three environment themed celebration events at separate locations around Hornsby Shire.

25 March - Earth Hour

at Thornleigh Community Centre

3 June - World Environment Day

at Upper McKell Park, Brooklyn

23 September – Sustainable Garden Day

at Fagan Park, Galston

Free native plant giveaways will feature at each of these events – so be sure to bring your rates notice!

Staff changes



Peter Coad

In early 2017, Peter Coad was appointed Manager of the Natural Resources Branch. Some of you may know him whilst others may not, so here's a brief outline of Peter's career journey.

Peter completed a science degree and worked with a bush regeneration company, followed by a stint with National Parks in the threatened species unit and implemented biodiversity surveys.

Afterwards he did weed mapping with the Cowan Catchment Management Committee, coordinated a bushland community monitoring program with the

Berowra Catchment Management Committee and developed wetland management plans for the Cattai Catchment Management Committee.

He then worked for a consultancy which undertook aquatic surveys throughout NSW which even included options for Sydney's Second Airport.

A move overseas then saw Peter working with Thames Water sorting out water supply issues to Buckingham Palace, and with the British Trust for Conservation Volunteers which used volunteers to recreate bird habitats in farmlands and even old cemeteries. He also spent time in Iceland, track building in National Parks covered with glaciers with assistance from the US Marine Corps.

Upon his return to Australia Peter was employed by Hornsby Shire Council, initially as the Water Quality Officer, before becoming the Team Leader for the Estuary Management Program.

In 2012, while still working with Hornsby Shire Council, Peter completed his PhD with the school of Civil and Environmental Engineering looking at how artificial intelligence can be used to predict harmful algal blooms. He is also a Fellow of the Peter Cullen Trust which aims to bring science and policy together.

On 8 April 2013, Peter was appointed to the position of Strategy Manager, Natural Resources and from January 2016 was the Acting Manager, Natural Resources.

Personally, Peter enjoys bushwalking, kayaking, natural history and a chat. Give him a call, he'd enjoy a chat with you.



Emma Hyland

Bushcare Trainer

A big hello to all Bushcare Volunteers! My name is Emma and I am very excited to be joining Hornsby Council's bushland team as a Bushcare Trainer.

My love of the Shire's bushland started in Binya Close, Hornsby Heights where I grew up, playing for endless hours down in the bush (this is also where I first began bush regeneration!).

My passion for the plants and animals of the area led me to completing a Conservation and Land Management Diploma at Ryde TAFE.

I am currently studying via distance education with Charles Sturt University, completing a Bachelor of Environmental Science specialising in Conservation Management. I am also employed as a Bush Regenerator working in the local area.

I am really looking forward to meeting and working with the many wonderful volunteers!



Gareth Debney

Coordinator – Bushland Programs

It is with much sadness that I have decided to leave my position with Hornsby Council and return to my old role at North Sydney.

I'm so thankful for the warm welcome I received from both staff and volunteers alike and have thoroughly enjoyed working with the Bushland Programs Team.

Despite being very fortunate to have had the opportunity to work with and learn from this great Team, I have missed the variety and hands-on project management that my old role provided. So when the opportunity to return was offered, I made the very difficult decision to leave.

Whilst I regret the impact this decision will have on the Team in the short term, I have every confidence that they will continue the great work which was already happening before I arrived and will continue to in the future. I wish you all the best on your Bushcare journeys!

Results of the 2016 bird survey

Breakfast Bird Surveys

Four sites were selected for the Breakfast Bird Surveys this year; Terrys Creek corridor at Epping (a repeat site), a CRR basin in Hornsby referred to as Clarinda Street wetlands (new site), Byles Creek Beecroft (new site) and Binya Close bushland in Hornsby Heights (a repeat site) – refer to Table 1.

Surveys were undertaken in 20min blocks at four separate locations across three Bushcare sites and beyond as well as Byles Creek bushland (not a current Bushcare site). Observations were recorded for both visual records and call only records. Observers were a mix of experienced and amateur bird watchers and support help from Bushcare volunteers. Bushcare volunteers were encouraged to participate for their own learning experience and to indulge in a gourmet breakfast hamper (of course). Participants used a range of field equipment to assist in identification such as binoculars, field guides and smart phone apps.

The four sites are all directly connected to greater areas of bushland; namely Berowra Valley National Park and Lane Cove National Park. Long term Bushcare sites exist at three of the sites except for the Byles Creek site.

A grand total of 57 species (58 in 2015) were recorded across the four sites for the duration of the surveys (60 min in total= 3 x 20 minute blocks) with an average of 33.5 species recorded across the four sites. 15 of the 57 species were recorded by call only recognition or 26% of all records. Of the 57 birds surveyed only two birds were an introduced species to Australia; Rock Dove and Red Whiskered Bulbul. A further three species were historically not recorded in Sydney- the Little Corella and Long billed Corella and Galah; the Sulphur Crested Cockatoo may also fit this description.

Several summer migrants were recorded including the delightful Black-faced Monarch (found twice for this survey), Channel-billed Cuckoo, Eastern Koel, Dollarbird, Rufous Fantail and Sacred Kingfisher.

Only two waterbirds were recorded utilising the permanent water source at Terrys Creek- the Australian Wood Duck and Pacific Black Duck.



Table 1

Site	Vegetation types* where bird surveys were conducted * Native Vegetation of the Hornsby Shire Smith & Smith 2008
1. Terrys Creek, Epping	Restored Blue Gum High Forest
	A high flow permanent creek with mixed exotic and indigenous vegetation along sections of the creek.
	Transitions from tall forest on clay soils to forest vegetation on sandstone soils- Peppermint Angophora Forest.
2. Clarinda Street Wetlands, Hornsby- new survey site for 2016	Bioremediation basins with extensive revegetation in the basin and surrounds; approximately 15 year old vegetation.
	Scribbly Gum Open Woodland/Heath. Burnt within the past 3 years.
3. Byles Creek, Beecroft- new survey site for 2016	Tall mature Blackbutt Gully Forest straddling Byles Creek. A large tributary of Devlins Creek which flows into LaneCove National Park eventually.
	Mix of private land from Malton Road and Council owned land.
	Long interval since fire, as such a lot of mesophyllic weed growth in understorey.
4. Binya Close, Hornsby Heights	Narrow Leaved Scribbly Gum Woodland.
	Peppermint Angophora Forest.

Many of the species recorded are expanding their ranges at the moment (or have been for the past 10 years or more) these include the Australian Brush Turkey, Channel-billed Cuckoo, Australian Raven, Powerful Owl and Brown Cuckoo-Dove. Noisy Miners and Red Wattle Birds continue to dominate urban areas and interfaces with bushland.

Several species are nomadic and opportunistically appear in bushland across northern Sydney depending on resources available to them. This group is largely dominated by roaming Honeyeaters accessing nectar sources. Species in this group include (from Honeyeaters first), Noisy Friarbird, Yellow-faced Honeyeater, Little Wattlebird and to a lesser extent Red Wattlebird. Non honeyeaters include the Silvereye.

Sadly, some species are in decline most notably for this set of birds the Glossy Black Cockatoo leads the list. It's preference for old large tree hollows for breeding, places it in direct competition with other 'introduced' aggressive cockatoos along with feral European bees utilising tree hollows for hives.

As for groupings based upon diet, insectivores were clearly the most common bird group. Seed/Fruit, Honeyeaters and Parrots were all fairly even after this. The least represented for this survey was the daytime Raptor group possibly due to the early time of the survey before suitable air thermals for soaring had begun due to the early southerly change that occurred on the day.

Results of the 2016 bird survey

Table 2

C= Call only V= Visual record

Species	Site 1 Terrys Creek Epping	Site 4 Binya Close Hornsby Heights	Site 5 Clarinda St Hornsby	Site 6 Byles Creek Beecroft	Notes
Australian Brush Turkey	V				Site 5: pre-survey
Australian Wood Duck	V				Site 1: included baby
Pacific Black Duck				V	
Pacific Baza					2015 record. None for 2016
Brown Cuckoo-Dove			V		
Wonga Pigeon		C	C	C	
Crested Pigeon	V				
Glossy Black-Cockatoo		C			
Galah			C	V	
Long-billed Corella				V	
Little Corella	C				
Sulphur Crested Cockatoo	V	V	V	V	
Rainbow Lorikeet	V	V	C	V	
Australian King Parrot	C	V	V	V	
Crimson Rosella	V	C	V	V	
Musk Lorikeet				C	
Eastern Rosella			V	V	Site 5: male outside survey
Brush Cuckoo					2015 record. None for 2016
Fan-tailed Cuckoo				C	

Eastern Koel	C	C	C	C	
Channel-billed Cuckoo	V		C		
Powerful Owl				V	Site 6: included 2 owlets
Tawny Frogmouth					2015 record. None for 2016
Laughing Kookaburra	V	V	C	V	
Sacred Kingfisher					2015 record. None for 2016
Superb Lyrebird		C			
Dollarbird				C	
White-throated Treecreeper	V		C	C	
Superb Fairy-wren	V		V		
Variegated Fairy-wren				V	
Spotted Pardalote		C	C	C	
White-browed Scrubwren	V	C	V	V	
Brown Gerygone	C	C		V	
Brown Thornbill	C	C	C	V	
Striated Thornbill		V			
Red Wattlebird		C	V	V	
Little Wattlebird	C		V	C	
Noisy Friarbird		V			
Noisy Miner	V	C	V	V	
Lewin's Honeyeater	C	C	C	C	
Yellow-faced Honeyeater				C	
Eastern Spinebill	V	C	V	V	
Scarlet Honeyeater					2015 record. None for 2016
Eastern Yellow Robin	V	V	C	V	
Eastern Whipbird	C	C	V	C	
Golden Whistler			C	V	
Grey Shrike-thrush		C			

Table 2 continued

Black-faced Monarch	V		V		
Leaden Flycatcher					2015 record. None for 2016
Magpie-lark			C		
Rufous Fantail		V	V		
Grey Fantail	C	C	C	V	
Black-faced Cuckoo-shrike	C				Site 5: pre-survey
Olive-backed Oriole	C	C	V	V	
Grey Butcherbird	C	C	V	V	
Australian Magpie	V	C	V		
Pied Currawong	C	C	V	C	
Australian Raven	C	C	C	C	
Satin Bowerbird			V		
Red-browed Finch					2015 record. None for 2016
Mistletoebird					2015 record. None for 2016
Welcome Swallow				V	
Silvereye	C	C	C		
Feral Pigeon	V				
Red-whiskered Bulbul			V		
Common Blackbird					2015 record. None for 2016
Indian Myna					2015 record. None for 2016
C= Call only V=Visual record					

Our next bird survey is on 28 October, we are planning at least four sites. This is also part of the Great Aussie Bird Count and our results will be entered into the database to create an Australia wide snapshot of the variety and abundance of local and feral birds. This will help us understand the impacts on our birdlife and what measures we can incorporate into our everyday activities to improve the prospects of our native birds. The next Aussie Backyard Bird Count will be held from 23-29 October 2017 aussiebirdcount.org.au

Community planting day

Last year Lions Club of West Pennant Hills-Cherrybrook contacted us as they wanted to volunteer for a better environment. They expressed an interest in providing something that was beautiful and would improve the quality of life for residents in the Cherrybrook or West Pennant Hills area. Together we developed a project to revegetate the western side of the creek at Cherrybrook Lakes.

We selected a site under the Blue Gums for many reasons including:

- To reduce water runoff from the bare earth under the trees.
- To improve the water quality of the creek.
- To reduce the noise of the traffic and make the park a great place to meet up with friends.
- To encourage kids to explore the natural areas of the reserve.
- To improve air quality of the park, as plants capture airborne particles such as dirt and dust particles.

The pathway next to the reserve will become more pleasant to walk along because you will be closer to the wildflowers. Studies have shown that when walking along a pathway with trees, people judge the walking distance to be less, therefore are more likely to walk. The vegetation corridor will moderate the surface temperature on the walkway and in the neighbouring playground.

Our first planting day was 10 October 2016. About 250 plants were planted in an area approximately 80 m². When the Lions Club members heard the success rate of new bushland plantings could be lower than 80%, they set themselves the challenge to raise the bar. The members cared for the new plantings, regularly watering and applying tonics to reduce planting stress, and in the end we ended up with a success rate of 98%. The next stage of the project has been scheduled for April 2017. At the end of this partnership, both sides of the creek will provide great habitat for native animals and the water birds.

Thank you to the Lions Club of West Pennant Hills-Cherrybrook because neighbourhood planting events strengthen communities and bring people together.



Lions Club volunteers

National Tree Day

National Tree Day is on Sunday 30 July, at Rofe Park, Hornsby Heights. Donna is working hard to set up a suitable site for National Tree Day. We are also planning a few more community planting days at the park.

Tom's Tassie Trip

Thomas Hickman, Bushcare Trainer, Hornsby Council

When I found out that I could combine a 145km trek through the wilderness of Tasmania with the potential to sight Australia's most critically endangered bird, I knew where my next vacation would be.

The Orange bellied Parrot (*Neophema chrysogaster*), also known as the OBP is a migratory bird that overwinters in coastal Victoria and South Australia. In summer they make the trip back across Bass Strait to Melaleuca, their only remaining breeding location in Tasmania's South West National Park. Melaleuca can be accessed via foot or plane, however I couldn't turn down the opportunity to fully immerse myself in Tasmania's unique scenery, so opted to walk.

The trek began at the Huon campground, which marked the beginning of the Port Davey track, and the start of the next five days walk. The first day on the Port Davey track offered wonderful views of the West Arthur Ranges and a taste of how difficult their traverse would be. The following days on the track blended into one another as we became accustomed to navigating tracks that twisted their way through knee deep mud on Button Grass Moorlands.

As the Port Davey track came to an end we approached the coastline and dropped down towards Bathurst Harbour. At this point we had to make a boat crossing at Bathurst Narrows where hikers were rescued only weeks before after becoming separated from the remainder of their group. With the crossing under our belts we turned our eyes to Melaleuca and the hopeful OBP sighting.

Much to my surprise it wasn't long after arriving at Melaleuca that I spotted a pair of OBPs. Several

feeding stations and nesting boxes are set up around Melaleuca, to improve the chances of survival for the remaining individuals and their offspring. Whilst at Melaleuca I had a conversation with a volunteer from the the Friends of the OBP group, whilst informative, it was very disconcerting to find out there are only approximately 14 individuals remaining in the wild. When the OBP returned from overwintering on the mainland in late spring (2016) only three females were recorded. The OBP captive breeding program has attempted to bolster the remaining wild population by releasing captive bred individuals prior to their northerly migration. Unfortunately these attempts have mostly been unsuccessful, with few or no captive bred individuals returning to breed the following season.

A last ditch attempt to save this species from extinction currently involves supplementing the nests of wild individuals with eggs from captive bred individuals in the hope they will be reared with a competitive advantage. It was clear to me that the volunteers and researches at Melaleuca were doing everything in their power to save this species from extinction.

After a day's well deserved rest we continued onto the South Coast track, which crossed beaches, weaved through moorland, coastal heath, rainforest and then up onto the magnificent Ironbound Ranges. The diversity of Tasmania's wildlife never ceased to amaze as we got close views of Tiger Quolls (*Dasyurus maculatus*) and Hooded Plovers (*Thinornis rubricollis*), which are now both rarities on the mainland.

I was also excited to find all three endemic Tasmanian frog species including the Moss Froglet (*Crinia nimbus*), Tasmanian Tree Frog (*Litoria*

burrowsae) and the Tasmanian Froglet (*Crinia tasmaniensis*). Walking the South Coast track provided a nice change from the Port Davey as funding has been well used to install boardwalk and stairs along most of the track. We arrived at Cockle Creek around midday on Christmas Day and spoiled ourselves with a dehydrated rice pudding meal and pesto pasta. This was an amazing trip that I strongly recommend to anyone with an adventurous spirit.



Tasmanian Tree Frog (*Litoria burrowsae*)



Moss Froglet (*Crinia nimbus*)



A Tiger Quoll (*Dasyurus maculatus*) snooping around our campsite for food.

Know your local wildlife
and monitor over time.



Get walking

If you are a regular bush walker on the Hornsby Heritage Steps; Blue Gum Track; Callicoma Walk or Beecroft Reserve Track then you will have noticed some pleasant changes over the past 12 months. Funding provided under Section 94 Developer Contributions; Council's Special Rate Variation and the State Government's Metropolitan Greenspace Program enabled the Bushland Programs Team to deliver substantial upgrades to these four popular bushland walking tracks.

Highlights of the work include:

- Beautifully hand-finished sandstone steps, edging and drainage culverts that blend seamlessly with the Great Depression-era Hornsby Heritage Steps. This work required a great deal of planning with dressed sandstone blocks delivered to the site using a heavy-lift helicopter.
- More than 150 new steps and 43 lineal metres of raised boardwalk traversing Beecroft Reserve.
- New signage and picnic facilities at the Rosemead Road Hornsby entrance to the Blue Gum Track along with re-grading of the track surface and sandstone step installation;
- Track edging, creek crossings and stabilising works along the Callicoma circuit track in Cherrybrook.

Whilst the upgrades are substantially completed, work to improve directional signage, track stability and user facilities on the tracks are ongoing. Although the primary purpose of the track upgrades is to improve safety and enhance the bushwalking experience, there is also a strong emphasis on track design that mitigates ongoing environmental damage. The use of high quality materials and specialist bushland construction contractors should result in long-lasting track elements (i.e. steps and boardwalks) with minimal impact.

This year, the Bushland Programs Team are planning to deliver more walking track upgrades in a number of locations including Florence Cotton Reserve in Hornsby; Carrs Bush in Galston; the Mangrove Boardwalk in Brooklyn Park and the entrance to Lyrebird Gully track in Mount Ku-ring-gai. Further details on these projects will be announced later in the year so stay tuned. We hope you enjoy the improved walking tracks and facilities!

Guided Bushwalk Program

The free guided bushwalk program is provided for Hornsby Shire residents only. Bookings for each walk are open one month in advance of the advertised date for the activity. Whilst we appreciate your enthusiasm for the program we are asking that participants only book up to a maximum of **6 walks per program**. This is due to the continuing popularity of the program and our aim to provide opportunities to new-comers to be involved. If you have any further queries please call the Natural Resources Branch on 9847 6832.

Sensational spiders

Spiders probably evolved about 400 million years ago from thick-waisted ancestors that were not long emerged from life in water.

The first definite spiders, thin-waisted arachnids with abdominal segmentation and silk producing spinnerets, are known from fossils dating back 380 million years ago (the Devonian Period) that's more than 150 million years before the dinosaurs. To compare with plant history, the first vascular plants appeared around the same time.

The first true spiders still around today (although not in Australia) are from the Mesothelidae family. Fossils of these spiders date back 300 million years ago (late Carboniferous). The next most ancient spider family is the Hexathelidae family dating back 240 million years ago in the Triassic. These are very ancient spiders and include funnel web spiders. More recently, during the Cretaceous, about 140 million years ago, around the time flowering plants evolved we found Orb weaving spider families. Some families, including jumping spiders and wolf spiders are more recent.

Spider Biology

The life history of a spider:

- Egg – usually wrapped in a silk egg casing
- Larva – the first life cycle after the egg has hatched, do not emerge from the egg casing
- Nymph – also remain in the egg casing
- Spiderling – emerge from egg casing, look like tiny spiders and may or may not be looked after by an adult (depending on the species)
- Juvenile – immature spider, no visible sexual characteristics
- Adult – the adult may undergo only one moult or many, depending on the species.

Typically male spiders have different proportions compared to females. Males have longer legs and smaller lighter bodies to improve their ability to find a mate. Female spiders are less mobile and tend to have large bodies and shorter legs in comparison. Silk is made and used by all spiders. Most spiders are generalist predators, but may discriminate on size, threat, chemical defences or movement. Spiders are an important part of the food web, their main prey are insects. In turn spiders are food for other predators, especially small birds, lizards, frogs, bandicoots and antechinus.



Spider Anatomy and identification

Juvenile spiders are often not identifiable to species, sometimes not even to a family! Eye pattern is very useful in identification. Spider location and activity provide useful clues to identification e.g. in web (note the web structure), running on ground, or in a burrow.

Did you know there are 3,729 described spider species in Australia (April 2016) however, it is estimated there true figure is between 10,000 and 20,000 different species.

Mygalomorphs – spiders that must use a stabbing motion to inject venom in prey. This includes, mouse spiders, brown trapdoor spiders and funnel-web spiders. Australian mygalomorphs are burrow dwellers. The spiderlings may live in their mother's burrow for some time until they disperse to establish their own burrows. Juveniles take several years to mature. Mature males cease moulting and only live for a year or so. During the mating season they go in search of a female.

Female spiders don't travel far, they usually only hunt around their burrow. They can continue to moult and live for many years – up to 30 years! Interestingly they need to mate after every moult as their entire surface is rejuvenated.

Araneomorphs – spiders who can use a pincer motion to inject venom in prey.

This group of spiders is very diverse, they inhabit a broad range of environments, have a diverse array of feeding strategies a huge diversity of silk types. In addition, the life cycles of some species can be short, several generations in one year, or long, taking one to several years to become an adult and continue to survive for many years.

Silk

Silk is made and used by all spiders. Silk is used to capture and wrap prey, to keep spiders from falling, travel by ballooning, create a home, to attract a mate and protect eggs. Spiders are the only group of animals that produce silk from spinnerets on their abdomen. Did you know, several kinds of silk are used in the construction of webs! Dragline silk is used for strong and non-sticky lines; those supporting the web. Sticky silk is used in the catching part of the web.

Spiders in the house

Generally spiders like to live in humid environments; usually your house is too dry for spiders. If a spider does wander into your house there are special techniques for capturing spiders and releasing them into the garden. See [youtube.com/watch?v=PB9RDgbecVg](https://www.youtube.com/watch?v=PB9RDgbecVg).

Note this video demonstrates how to catch a funnel web however; it is a great technique to use for any spider. While your home is too dry for most spiders there are

some common house spiders that thrive in our homes. These common house spiders are introduced species and include: Daddy-long-legs, the spitting spider, the wall spider and cupboard spiders. These spiders are perfectly at home with low humidity and will die if you do take them outside.

Myths busted

White-tailed spider bites do not cause necrotic infections; in fact, these spiders enter the house in search of prey. Their prey is other types of spiders, particularly black house spiders.

Daddy long legs do not have super-powerful venom. Insect spray does not kill spiders.

Dangerous Spiders?

by Dr Helen Smith (Australian Museum)

Buses

- Perform useful roles in our environment (transporting people).
- Have potential to kill humans.
- Sometimes arrive unexpectedly into our lives (vehicle accidents).
- Children need to learn to keep clear and how to cross the road safely etc.
- Despite widespread first aid knowledge and continual advances in medicine, people die every year from accidents involving buses (6 pedestrian fatalities in NSW 2016).

Spiders

- Perform useful roles in our environment (eating pest arthropods).
- Have potential to kill humans.
- Sometimes arrive unexpectedly into our lives (wander into homes or accidentally end up in our clothes).
- Children need to learn to look but don't touch, don't stick fingers in holes etc.
- Due to improved first aid advice and antivenomes, there have been few, if any, deaths attributed to Australian spider bites since the 1980s.

Which is more dangerous?

Buses undoubtedly are dangerous when our behaviour is inappropriate around them. Same with spiders. Respect spiders (and buses). Learn first aid!

Useful websites: australianmuseum.net.au/spiders
australianmuseum.net.au/document/Original-Web2spider-guide
australianmuseum.net.au/document/Web2spider-supplement



Ticks

What to do?

Ticks are active for most of the year but are most active following rain and periods of high humidity.

Generally, you are likely to be bitten by a tick from October to February. Tick survival is dependent on humidity as they desiccate and die in high temperatures and low humidity.

Preventing tick bites

- Wear a long-sleeved shirt and long pants when walking or working in areas where ticks occur.
- Tuck pants into your socks.
- Wear light-coloured clothing, making it easier to see ticks.
- After being outdoors, remove and place clothing in a hot dryer for 20 minutes to kill ticks that may be present.
- Undress and check for ticks daily, checking carefully on your neck, scalp and abdomen (top of your pants).
- Use insect repellent, particularly brands containing DEET.
- Use permethrin-treated clothing when working in areas known to have ticks.

Managing tick bites

Adult tick:

Freeze it! Don't squeeze it!

Do not try to pick a tick out of your skin with tweezers or other tick-removal gadgets.

Use an ether-containing spray (your Bushcare Trainer should have a suitable product, or see your pharmacist)

Then, either wait for the tick to drop off or seek medical attention for it to be removed, taking care not to squeeze the tick because this increases the amount of tick saliva entering your body.

If you have been outdoors, inspect areas that itch before you scratch.

Nymph and Larval Ticks

Dab it! Don't grab it!

Apply permethrin cream to kill juvenile ticks (such as Lyclear)

Managing ticks around the home

Ticks do not like dry conditions. Keep overhanging foliage and leaf litter to a minimum and mow your lawn regularly.

The Paralysis Tick will crawl up the stems of grasses or along branches and 'perch' ready to latch on to a passing animal, including humans. They rarely climb higher than 50cm in their habitat and do not drop out of trees, despite this common belief. However, after landing on a person or animal they can walk up the body and attach to the head area.

Allergic conditions caused by tick bites

The most common serious medical complaints caused by ticks are allergic reactions resulting from a bite.

These reactions could be:

- Large local reactions
- Tick-induced anaphylaxis
- Mammalian-meat induced anaphylaxis

Large local reactions

Large local reactions are allergic reactions.

Treatment consists of rest, elevation of the affected area above the level of the heart, application of ice to the site of the bite to help reduce swelling and pain, antihistamines while swelling persists and oral cortisone for inflammation.

Anaphylaxis caused by tick bites

- Life-threatening allergic reactions to ticks are much more common than similarly severe reactions to bees or wasps.
- Fatal anaphylaxis to tick bites is rare.
- Australian researches have shown the allergens provoking anaphylaxis are proteins in tick saliva.
- People who have an anaphylactic reaction to a tick bite react only when the tick is disturbed.

Mammalian meat allergy

Typically tick bites occur before any allergic reactions to mammalian meats. Mammalian meat allergy symptoms often appear months after the tick bite. The allergic reaction to red meat is typically a delayed reaction occurring 3-6 hrs after eating the meat.

For more information visit the Tick Induced Allergies Research and Awareness (TIARA) website: tiara.org.au



Hollows as homes

The Hollows as Homes project was initiated in 2016 by Dr John Martin, ecologist at the Royal Botanic Gardens, Sydney.

The intention of this project is to fill the considerable gaps in our current knowledge and to use the data to build a picture of the location, type and number of tree hollows across the country.

The Hollows as Homes initiative is in response to the steady and ongoing loss of mature hollow bearing trees in NSW. More than 300 native species rely on hollows in urban, agricultural and rural contexts. In NSW alone, 40 native species are listed as threatened due to the loss of hollow bearing tree species. The removal of dead or live trees with hollows will result in declining numbers of hollow dependant species.

Hollows are used as habitat and nesting by a wide range of native species, which includes mammals, frogs, birds, reptiles, insects and spiders. Hollows are cavities appearing in both live and dead trees. They provide shelter, nesting, roosting and foraging resources to wildlife. They are the result of limb breakage following winds and storms, lightning strikes, fire, termite, insect or fungal attack. Hollows take more than 50 years to form and usually occur in mature trees. Individuals or community groups are encouraged to look for hollow bearing trees in their local backyards, streets, parks, natural reserves and Bushcare sites.

All it takes is to visit the Hollows as Homes website (hollowsashomes.com) and record all types of hollows using your phone, tablet or computer. Long term monitoring of visitors and visits to hollows is also crucial to understand how different species use hollows.

The Hollows as Homes seminar presenters and their projects

Presenters involved in different projects shared their expertise and talked about the science, the benefits, the challenges and the knowledge (or lack of) behind hollows and their users. Arborists Narawan Williams and Michael Sullings, demonstrated how to carve artificial hollows. They also talked about how the design of nesting boxes has improved recently through carefully choosing appropriate materials, devising long lasting attachment methods, dealing with temperature issues inside nesting boxes, position and access holes sizes. Both stressed on the importance of designing nesting boxes tailored to the species targeted.

Local Land Services Officers Peter Ridgeway and Jen Schabel, studied the presence and the condition of hollows (arboreal, logs on the ground and nest boxes) in public reserves across Western Sydney. Very little remnant hollow bearing trees were located in the grassy woodlands and river flats of the Cumberland Plain Woodland vegetation community. This is due to the fact that less than 10% of the original extend of this vegetation community remains following its extensive clearing for agricultural purposes and urban development. To address this great shortage of resources, Peter and Jen are looking at ways of increasing numbers and use of nesting boxes, hollow pruning and log translocation to make up for the scarcity of natural hollows.

In equally disturbed areas of the NSW around Orange and Dubbo, Colleen Farrow (Senior Land Officer at Central Tablelands Local Land Services) and her team have embarked on a large scale planting program to provide homes for the vulnerable Superb Parrot. Superb Parrots feed in the Box Gum Grassy Woodland, which is an Endangered Ecological Community, less than 5000 pairs are recorded in

the wild. Superb Parrots are colony nesters and use multiple hollows, often in the same tree. In one year, 200 artificial hollows have been created and more than 2000 native plants providing foraging habitat have been planted to try and optimise the survival chances of the Super Parrot.

Dr Brad Law (Forest Science Unit: NSW Industry – Lands) talked about microbats and their reliance on hollows and their important role in the ecosystem by feeding on insects. Microbats are found in all types of landscapes. The Gould's Wattle bat which is the most common urban bat is known to feed on moths around artificial lights whereas Long-eared bats are sensitive to artificial light and tend to remain in more vegetated areas. Microbats tend to roost high up in larger trees, which keep them safe from most predators. They roost together and switch roosts frequently in order to avoid competition, particularly from Lorikeets.

Dr Adrian Davis (University of Sydney) gave a summary of his PhD thesis which focused on the ecology of Sydney parrots and how our most common urban parrot species, mostly Rainbow Lorikeets and Sulphur Crested Cockatoos, use hollows in the urban landscape. Adrian's study focused on occupancy rates by common parrot species. His study found that hollows in parks, sporting fields, street trees and golf courses where medium to large remnant trees are still found were extremely sought after. The study also highlighted and confirmed that Lorikeets and Cockatoos tend to fight and compete amongst themselves in urban areas more than they do in natural areas -adding strength to the adage 'Location, location, location'

If you would like to be part of this exciting new project as an individual or as a Bushcare group and learn more about the benefits and challenges around natural and artificial hollows, jump online, visit hollowsashomes.com and start recording your findings!



Hollows used
as habitats

Events

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

Exhibition: Photo competition winners 2016

Bushcare photo competition winners will be on exhibition. A book will be provided for those who wish to comment on specific photos or the exhibition in general.

When

6-28 April, 9am-10am

Where

Pennant Hills Library, cnr Ramsay Road & Yarrara Road, Pennant Hills

Bushcode workshop

The Bushcare Training Workshop is a membership requirement, for new and renewing volunteers. The general themes are Bushcare, habitat protection, monitoring your site and working safely.

When

Monday 10 April, 9am-3pm

Where

Earthwise Cottage, 28 Britannia Street, Pennant Hills

Bookings

hornsby.nsw.gov.au/whatson or phone 9847 6362

Waratah Bay Free Guided Bushwalk

From the top of the ridge this walk descends down a narrow walking track to Waratah Bay on the quiet waters of Cowan Creek. So named by local pioneer Edward Windybank in the 1880's who worked hard as a shipwright and a boat builder and for some years lived in a cave. After many years he built a small family home and boatshed at Waratah Bay of which remnants remain along with one of his slowly rusting metal boat hulls. We then return to the start via the steep uphill track.

Grade 3 ↓220m ↑220m

When

Saturday 22 April, 9am

Where

To be advised upon booking.

Bookings

Bookings are essential and open 10am, 22 March

Crop n Swap

Do you find yourself with an excess of fruit, herbs, flowers or eggs? Perhaps you love to make bread or relishes? Why not join in one of our

swaps. No money exchanged, it's simply an exchange of excess food items that you have. All items will go on display with a viewing before everyone has the chance to take something they need.

When

Saturday 29 April, 10am-11am

Where

Pennant Hills Leisure & Learning Centre, 8 Warne Street, Pennant Hills

Bookings

Register by emailing agenova@hornsby.nsw.gov.au or come on the day.

Estuary Walk- Crosslands

This easy walk is aimed at showcasing the diversity of the estuary environment in Berowra Creek, up to the tidal limit where the freshwater reaches flow down from Galston Gorge. When the water is clear, we often see estuary fish like bream and mullet – keep a look out for surface splashes! The walk also passes through some majestic stands of tall timbers and grey myrtle rainforest pockets. You can often see or hear lyrebirds. The walk will follow the Great North Walk track and the turnaround point is situated approximately 3 km west of Crosslands Reserve.

Grade 3 ↓200m ↑200m

When

Sunday 30 April, 9am

Where

Crosslands Reserve

Bookings

Bookings are essential and open on 30 March, 10am

Backyard Chickens

Thinking about getting chooks? You'll love them! They give so much and don't ask for much in return. Learn how to keep them safe and happy, and get the most out of your friendly feathered friends at your place.

When

Friday 5 May, 10.30am

Where

Hornsby Library Library, 28-44 George St, Hornsby

Bookings

hornsby.nsw.gov.au/whatson or phone 9847 6613

Grasses workshop

This is a great workshop to fine tune your grasses and groundcovers identification. Suitable for both beginners and experienced volunteers. This workshop is part of our Rural Lands Incentive Program. Note the change in venue, date and time from listing in Calendar.

When

Saturday 6 May, 1.30pm-4.30pm

Where

Saint Benedict's Monastery, 121 Arcadia Road, Arcadia

Bookings

hornsby.nsw.gov.au/whatson or phone 9847 6362

Wildlife Spotlighting Activity

A special event showcasing the secretive world of our local nocturnal animals and discover what they get up to when the rest of us are getting to sleep. After familiarising ourselves with some local creatures of the night and their adaptive features, join us for an easy spotlight walk around the bushland in Muogamarra Nature Reserve. Please note the walk will be undertaken in the dark, after sunset. A small personal torch is advised however the guide will have lighting equipment for exclusive use to the success of the activity. Please note this walk is for adults and 8 years old and over.

Grade 3 ↓200m ↑200m

When

Wednesday 10 May, 5:30pm

Where

Saint Benedict's Monastery, 121 Arcadia Road, Arcadia

Bookings

Bookings are essential and open on 10 April, 9am

Bushcode refresher

This is essential training for volunteers to maintain their Bushcare membership. We will discuss site monitoring, processes and procedures for the program and pick up your free native plants. Light supper provided.

When

Wednesday 15 May, 6pm-9pm

Where

Earthwise Cottage, 28 Britannia Street, Pennant Hills

Bookings

hornsby.nsw.gov.au/whatson or phone 9847 6362

Free Native Plant giveaway

Open to all Hornsby Shire Council ratepayers, from all suburbs. Please bring your current Hornsby Shire rates notice and ID. Note we have limited stock available and issue strictly four plants per household.

When

Saturday 3 June, 11am-2pm

Where

Upper McKell Park, Brooklyn

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6832

World Environment Day celebration

Celebrate World Environment Day at Brooklyn. There will be stalls about volunteering, water saving, protecting our catchment and many more.

When

Saturday 3 June, 11am-2pm

Where

Upper McKell Park, Brooklyn

Bookings

hornsby.nsw.gov.au

Energy Saving Made Easy

Come along to this free workshop and learn how to beat high electricity prices.

When

Monday 5 June, 10am-12pm

Where

Hornsby Council Chambers
296 Peats Ferry Road, Hornsby

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6613

Aboriginal Seasons talk

Aunty Fran will take us on a journey through the annual seasons, only they won't be called Summer, Autumn, Winter or Spring. Come along and find out how indigenous Australians determined the seasons.

When

Saturday 1 July, 2pm-4pm

Where

Hornsby Library, 28-44 George St, Hornsby

Bookings

Bookings essential, 9847 6614 or library@hornsby.nsw.gov.au

Exhibition: Photo competition winners 2016

2016 Bushcare photo competition winners will be on exhibition at the library. A comments book will be provided for those who wish to comment on specific photos or the exhibition in general.

When

26 June-21 July, 6pm-9pm

Where

Hornsby Library, 28-44 George St, Hornsby

Bushcode workshop

The Bushcare Training Workshop is a membership requirement, for new and renewing volunteers. The general themes are Bushcare, habitat protection, monitoring your site and working safely.

When

Monday 3 July, 9am-3pm

Where

Earthwise Cottage, 28 Britannia Street, Pennant Hills

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6362

National Tree Day

Celebrate National Tree Day by planting some trees at Rofo Park, Hornsby Heights.

When

Sunday 30 July

Where

Rofo Park

Bookings

For details see website
treeday.planetark.org

Plant identification and bushwalk

Join us on a delightful walk in the wilderness of Marramarra. There will be plenty of wildflowers out, fresh morning air and great company.

When

Saturday 19 August, 9am-12pm

Where

Marramarra National Park: meeting point to be provided upon booking.

Bookings

hornsby.nsw.gov.au/whatson
or 9847 6362

Exhibition: Our Beautiful Bushland - photo competition entries 2017

This is your opportunity to see the Our Beautiful Bushland photo entries. Voting will take place at the Christmas Party.

When

18 September-16 October

Where

Hornsby Library, 28-44 George St, Hornsby

Bushcode Refresher

This is essential training for volunteers to maintain their Bushcare membership. We will discuss site monitoring, processes and procedures for the program and pick up your free native plants. Light supper provided

When

Wednesday 18 October, 6pm-9pm

Where

Earthwise Cottage, 28 Britannia Street, Pennant Hills

Bushcare site tour

Tag-along tour of Berry Park, Mt Colah and Currawong Bushcare Groups.

When

Saturday 21 October, 9am-12pm

Where

Meet on site.

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6362

Citizen Science: Bird surveys

Join one of our bird survey groups as they go into local reserves to monitor bird activities. Each group will have a local bird expert who can identify common bird calls and most local birds by sight. At the end of the session you can tuck into a gourmet breakfast hamper.

When

Saturday 28 October, 8am-10.30am

Where

Up to four sites across the Hornsby Shire.

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6362

Bushcode workshop

The Bushcare Training Workshop is a membership requirement, for new and renewing volunteers. The general themes are Bushcare, habitat protection, monitoring your site and working safely.

When

Saturday 25 November, 9am-3pm

Where

Earthwise Cottage,
28 Britannia Street, Pennant Hills

Bookings

hornsby.nsw.gov.au/whatson
or phone 9847 6362

Bushcare Christmas party

Celebrate another fabulous year of Bushcare. Save the date, location and time to be announced in the next enews.

When

Saturday 2 December

K5 rabbit programs and rabbit-scan

Feral rabbits are a declared pest in NSW and land owners have a legal obligation to control their numbers.

Whilst this task is difficult in any environment, it is especially so in areas of urban and semi-urban bushland where the range of available control measures are few and their effectiveness hampered by numerous factors.

In the past, biological controls such as Myxomatosis and Calicivirus (also known as RHDV) have been very effective in suppressing rabbit numbers in combination with other control measures.

In the Sydney basin however, these 'biocontrols' have been less effective due to the relatively wetter climate and an endemic resistance in our feral rabbit population.

In order to assist land managers with the task of Feral Rabbit management,

the NSW Government's Greater Sydney Local Land Services (LLS) is coordinating the release of a new calicivirus strain called K5 RHDV. Trials have shown that this strain is not adversely affected by Sydney's climate and there is no known resistance in Sydney's feral rabbit population.

Coordinated release of the K5 strain will be happening at a number of locations across Sydney and rural landholders are encouraged to contact the Greater Sydney LLS to see if they can be involved too. The wider and more inter-connected the release area is – the more effective the biocontrol will be.

With any pest control program, monitoring is a fundamental component. Recording the presence of rabbits on private or public land can be easily done using the RabbitScan website developed by the Australian Government's Invasive Animals Cooperative Research Centre.



I encourage anyone interested in bushland conservation to visit the RabbitScan website at rabbitscan.org.au and record where they have seen, or regularly see, feral rabbits.

For further information, please contact the Greater Sydney LLS on 1300 795 299 or visit greaterSydney.lls.nsw.gov.au

Owners of pet rabbits are advised to visit their vet and arrange for their pet to be immunised against the K5 RHDV.

PLEASE CONTRIBUTE TO THIS NEWSLETTER

You can send your stories or letters to the Editor for the next edition by 1 JANUARY 2018

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

