BANDICOOTTIMES Spring 2019 No 74

SPECIAL REPORT PROTECTING OUR WILD HEART





hobartcity.com.au/bushcare

Bushcare Roundup



Sjaan Field Program Officer Bushcare

We hope you enjoy our spring edition of the *Bandicoot Times*, which features a special report on the City of Hobart's new conservation plans for Hobart's bushlands.

The plans examine the incredible natural values of Hobart's bushland reserve system, its greatest threats and how we need to manage them.

The conservation plans will help guide priorities for our Bushcare volunteers and staff, and help us all play a greater role in protecting the ecological integrity of our bushland reserves.

Bushcare has kept active during the chilly months. We were at Farm Gate Market for National Tree Day, where we caught up with locals and gave away 280 native plants to shoppers.

Mt Nelson Bushcare organised a planting at Tolmans Hill Park, drawing a terrific force of 44 volunteers, including the Mt Stuart Scout group and Wellspring Anglican church members. This fantastic team effort resulted in 571 native plants finding a new home in the park.

Our volunteer Trackcare teams have carried out some superb work at the Drops and Strickland Falls crossing tracks in Wellington Park. They plan to complete the track work at our Sunday 15 September dig day – so we still need plenty of keen volunteers!

We are giving away more native Tasmanian plants during spring to encourage even more people in Hobart to 'go native' in their gardens and help provide food and shelter for our local wildlife. Check out the Working Bee Program for details.

It's so exciting to be part of Bushcare as an increasing number of people realise the value of our volunteer work to the community and natural environment. In the past year alone:

- our volunteer base increased by 53 per cent
- we delivered 162 activities
- 703 people took part in a Bushcare activity
- 269 new volunteers helped swell our numbers.

Our 13 Bushcare groups contributed an impressive 4308 hours of volunteer work! Trackcare grew strongly, drawing 117 new members to its ranks. They are making great gains improving our tracks and trails.

We thank every volunteer who has helped care for our much-loved bushland reserves and hope you have enjoyed the experiences as much as we have!

Bush Adventures: a natural tonic

The idea that nature is good for children is widely held, but until recently it's been more of an intuition than an idea backed by research.

Now, the research is in, time spent in nature helps kids learn and develop as they grow older. It's also one of the best ways kids can have fun with the family.

So, if your family is yet to experience one of the City of Hobart's Bush Adventures activities, this spring is the time to start!

Activities include Sounds of Nature, a musicmaking workshop with percussion maestro Can Master Smash. There will also be an Aboriginal cultural workshop and yarning circle with Tasmanian indigenous educator Trish Hodge, a night walk in Waterworks Reserve, Discovery Walks, Bush Stories and nestbox building workshops.

For the full program visit the City of Hobart website: www.hobartcity.com.au/bushadventures.



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PHOTOS: The Eastern banjo frog, left, and the cover photo of a scarlet robin were taken by Michael Roberts.



A pademelon reaches for a feed. Photo: Michael Roberts

Wild Hobart, a city in a forest

Managing the 4600 hectares of native bushland surrounding the City of Hobart in a series of connected, protected nature reserves is no small task.

Alpine heaths and bogs swathe the tops of the city's wild mountain backdrop, kunanyi/ Mt Wellington, eucalypt forests cloak the mountain's sides, towering Tasmanian blue gums shadow our rivulet corridors and native grasslands flank the River Derwent.

Within these areas are places of extraordinary value.

Knocklofty Reserve, for example, protects a large area of pre-European, old growth white gums, an extremely rare natural



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commodity in a landscape that has changed dramatically over the past 200 years.

The Queens Domain is a stronghold for the eastern barred bandicoot, which is considered extinct in the wild on the mainland and has been almost entirely lost from its original range in Tasmania.

'The City of Hobart manages an incredibly diverse range of bushland reserves for their natural values as well as the recreational opportunities they create for the people who live in Hobart and our many visitors,' says Elise Jeffery, who manages the City's fire and biodiversity unit.

'We are committed to working with the local community to retain, promote and enhance these natural values for the long-term environmental, social and economic benefit of the community.'

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HABITATS UNDER THREAT

Black peppermint forest and woodland on sandstone

This forest and woodland community is dominated by black peppermint (*Eucalyptus amygdalina*), a eucalypt found only in Tasmania. Healthy sites have a diverse shrub layer but are vulnerable to grazing, a high frequency of fire, woody weeds and *Phytophthora cinnamomi*, a plant pathogen that destroys bushlands, heath and woodlands.

Location: Knocklofty and Waterworks reserves, Ridgeway Park.

Blue gum dry forest and woodland

Mostly found on dolerite ridges, slopes and flats, this blue gum forest and woodland community provides important habitat for the critically endangered swift parrot, which is dependent on the blossoms of the Tasmanian blue gum (*Eucalyptus globulus*), its main food resource during breeding.

Location: Bicentennial Park, Knocklofty Reserve and Queens Domain.

Black gum forest and woodland

Typically occurs on poorly draining, damp sites such as flats, depressions, drainage lines and gullies. Dominated by eucalypts commonly known as black gum (*Eucalyptus ovata*), these forests and woodlands are characterised by a sedgey understorey, and provide essential habitat for a diverse range of threatened native animals including the eastern quoll, Tasmanian devil and the swift parrot.

Location: Kalang Avenue Reserve, Knocklofty Reserve and Bicentennial Park.

Lowland native grasslands of Tasmania

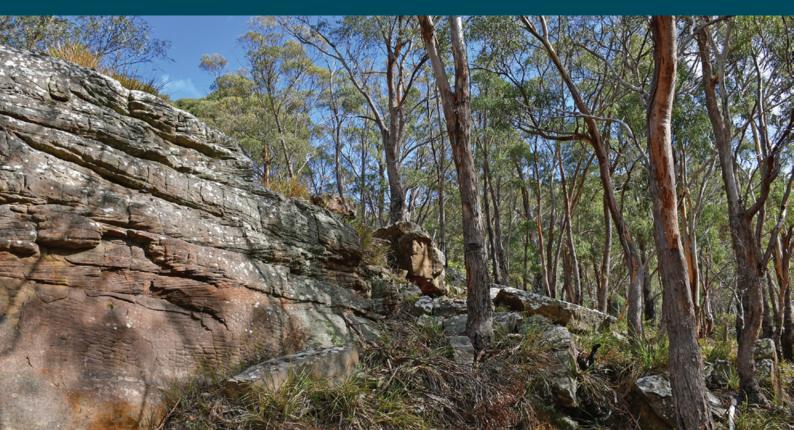
This nationally threatened ecological community is dominated by kangaroo grass and characterised by native lilies, daisies, orchids and other herbs nestled into grassy tussocks. It supports a unique set of native animals including the tussock skink and eastern barred bandicoot. It is regarded as one of Tasmania's most threatened and fragmented ecosystems and the most depleted vegetation formation in the state.

Location: The Queens Domain.

Silver peppermint forest and woodland

Found only in Tasmania this ecological community has been extensively cleared for agriculture, and very little of what remains is protected. These dry sclerophyll forests and woodlands are generally characterised by a shrubby understorey with low cover and diversity.

Location: Kalang Avenue Reserve, McRobies Gully, Waterworks Reserve and Ridgeway Park.





A grey butcherbird with its morning catch. Photo: Michael Roberts

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Elise's team is critical to managing these natural areas and the wildlife they protect by controlling and where possible eradicating environmental weeds, reducing fuel loads to mitigate the risk of dangerous bushfire and restoring degraded landscapes to their natural state.

As part of that work the City has produced *Protecting Our Wild Heart*, which outlines its plans for protecting Hobart's bushlands, ecosystems, native plants and animals.

The plans identify high conservation value areas within Hobart's bushland reserve system as management priorities.

They also identify the greatest threats to the health of Hobart's bushland reserves: invasive weeds, pest animals, climate change, uncontrolled wildfire and habitat fragmentation. Biodiversity hotspots that will be a focus for the City include Knocklofty and Waterworks reserves, Ridgeway Park and the Queens Domain.

There will also be a greater focus on threatened species found within the City's bushlands. Some of these threatened species are endemic to Hobart – they are found nowhere else on Earth – and include the Knocklofty leekorchid, Mt Wellington eyebright, silky snail and the Ammonite snail.

If not protected in Hobart's bushland reserves these species could become globally extinct.

Managing bushland reserves based on their biodiversity values and the threats that may impact on those values is recognised as the best way to achieve positive long-term outcomes for the City's bushland reserves and the native plants and animals that rely on them for survival.

Key threats

In Australia a range of threats are to blame for a decline in biodiversity across the country. Australia's Biodiversity Conservation Strategy 2010-2030 identified the main threats, which include:

- habitat loss, degradation and fragmentation
- invasive species
- unsustainable use and management of natural resources
- changes to the aquatic environment and water flows
- changing fire regimes
- climate change (Natural Resource Management Ministerial Council, 2010).

Protected areas in urbanised settings suffer from additional pressures, including urban

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sprawl, littering, vandalism, rubbish dumping, light and noise pollution.

They also suffer from urban edge effects such as more frequent and severe fires, air and water pollution and the introduction of invasive alien species.

Four key threats to Hobart's bushlands have been identified:

Habitat fragmentation and degradation

Hobart's bushland reserves are exposed to a large number of urban elements, such as roads, nearby housing, walking tracks and trails, all of which can impact on habitat fragmentation and degradation.

These impacts can be managed by maintaining the health of large, intact, healthy areas of native vegetation and protecting them from further fragmentation. Protecting hollow-bearing trees as critical wildlife habitat is another important task.

Climate change

Climate change will amplify the impacts of existing threats such as habitat fragmentation and invasive species. It will directly threaten some species and ecological communities. Climate change impacts can be alleviated by ensuring Hobart's bushland reserves remain ecologically robust and provide connectivity throughout the landscape, allowing native species to move through a changing environment.

Protecting and maintaining a diversity of habitats will also be a key task.

Invasive species

Environmental weeds are one of the biggest threats facing our bushland reserves. They take over ecosystems, choking waterways, pushing out native plants and



HEALTHY RIVULETS

As well as being important in their own right, Hobart's rivulets and the native vegetation in and around them (the riparian zone) create vital habitat corridors for the movement of our native plants and animals. Rivulets play a critical role in our bushlands in the face of climate change – in times of drought the high productivity and diversity of plant communities found within the riparian zone supports a range of native animals and provides safe havens from increasing temperatures.

Pictured, a platypus plies the waters in the Hobart Rivulet. Photo: Michael Roberts

altering the habitat available for native animals. Of the 1513 plant species recorded in Hobart's bushlands more than a third (37%) are considered introduced species.

Not all are a threat to our bushlands, but those that are have to be taken very seriously. Weeds of particular concern include bluebell creeper, Chilean needle grass, blackberry, heather, cotoneaster, Spanish heath and orange hawkweed.

Pest animals, including cats, dogs and disease are also major invasive threats. Predation by feral cats is considered the most significant factor in Australia's recent mammal extinctions, and regarded as the factor impacting the largest number of threatened and near threatened mammals in Australia.

The interaction of wildlife and domestic dogs is not well documented, but there is anecdotal evidence dogs opportunistically hunt native animals, especially on the urban fringe.

Fire

The careful and considerate use of fire is the single greatest natural tool we have at our disposal for the long-term management of major ecological threats such as weeds and wildfire within Hobart's bushland reserves.

Every year the City of Hobart carries out strategic fuel reduction burns to reduce the amount of flammable materials that build up on the ground. If not managed, these materials could lead to catastrophic wildfires, destroying important habitat refuges such as old tree hollows, wet gullies and threatening nearby homes and human lives.

Burning is also used to control and where possible eliminate environmental weeds.

For a copy of the full report, email parks@hobartcity.com.au.

OUR THREATENED SPECIES

The City of Hobart's bushland reserves protect many native plants and animals, including threatened species and vegetation communities listed at state and federal levels. Ensuring our reserves remain ecologically healthy and robust is critical to protecting these vulnerable species.

Within the City are 28 vegetation communities. This includes one federally-listed vegetation community, Lowland Native Grasslands of Tasmania, which are critically endangered under the Environment Protection and Biodiversity Conservation Act 1999.

Four vegetation communities are considered to be threatened and listed on Schedule 3A of Tasmania's Nature Conservation Act 2002.

Ten flora species listed under the Environment Protection and Biodiversity Conservation Act 1999 are known to occur within Hobart's bushland reserves. They are also listed on Tasmania's Threatened Species Protection Act 1995.

Eleven fauna species listed under the Environment Protection and Biodiversity Conservation Act 1999 are known to occur in our bushlands and of these, nine are also listed on the state Threatened Species Protection Act 1995.

Of these threatened species, five are endemic to Hobart – the Ammonite snail, forest fingers, Knocklofty leek-orchid, Mt Wellington eyebright and silky snail.



KEY FLORA SPECIES

- Forest fingers, Caladenia sylvicola
- Mt Wellington eyebright, *Euphrasia gibbsiae* subsp. wellingtonensis
- Stinking pennywort, Hydrocotyle laxiflora
- Knocklofty leek-orchid, Prasophyllum perangustum
- Bare midge-orchid, Corunastylis nudiscapa
- Shade nettle, Australina pusilla subsp. muelleri
- Dainty leek-orchid, Prasophyllum amoenum

KEY FAUNA SPECIES

- Silky snail, Roblinella agnewi
- Ammonite snail, Discocharopa vigens
- Tussock skink, Pseudemoia pagenstecheri
- Tasmanian Chaostola skipper, Antipodia chaostola subsp. leucophaea
- Eastern barred bandicoot, Perameles gunnii
- Grey goshawk, Accipiter novaehollandiae
- Swift parrot, Lathamus discolour
- Masked owl, Tyto novaehollandiae
- Eastern quoll, Dasyurus viverrinus
- Tasmanian wedge-tailed eagle, *Aquila audax* subsp. Fleayi
- Little penguin, *Eudyptula minor*

Considered extinct on the mainland eastern quoll numbers are now falling in Tasmania. Photo: Michael Roberts

Masked owl

This owl is the largest of Tasmania's nocturnal birds, an amazing predator that can pinpoint prey (small mammals, rats and mice) in the dark and fly just inches above their prey without being detected. They are dependent on large old-growth hollow-bearing trees that are an irreplaceable commodity. In an urban landscape, one of the greatest threats to the masked owl is secondary poisoning from rodent bait. Its population has been estimated to be only 500 breeding pairs in Tasmania. The masked owl (Tasmanian) is listed under the federal Environment Protection and Biodiversity Conservation Act 1999 and Tasmania's Threatened Species Protection Act 1995.

Swift parrot

The nationally-listed, critically endangered swift parrot is a tiny, very fast bird that winters on the mainland but returns to Tasmania every summer to breed. It is dependent on blue gum and black gum dominated forest and woodland with large hollow bearing trees and can be found foraging in Knocklofty Reserve, Ridgeway and Bicenntenial parks.

Eastern quoll

Once widespread throughout south-eastern Australia the species is now considered extinct on the mainland and has recently undergone rapid and severe population decline in Tasmania. The species' distribution is associated with areas of low rainfall and cold winter minimum temperatures, suggesting climatic changes may be having an impact. Direct competition with feral cats for food has also been devastating to the species. The eastern quoll is listed as endangered under the federal **Environment Protection and Biodiversity Conservation Act.**



The masked owl is Tasmania's largest nocturnal bird. Photo: Michael Roberts

Eastern barred bandicoot

One of Australia's most endangered species, the eastern barred bandicoot is considered extinct in the wild on the mainland and has been almost entirely lost from its original range in Tasmania.

The Queens Domain, Knocklofty and Waterworks reserves are particular strongholds for the bandicoot, providing suitable



The eastern barred bandicoot is one of Australia's most endangered species. Photo: JJ Harrison | CC BY-SA 3.0

grassland/grassy woodland habitat. Predation from cats and dogs is a massive threat to their ongoing survival, both within Hobart's bushland reserves and across Tasmania.

Park lavished with tender loving care

ambert Park bushland reserve came in for some tender loving care from Mount Carmel College students in July as part of Landcare Tasmania's 25th anniversary celebrations.

The year 10 students planted 100 native trees, weeded, picked up rubbish and explored the bushland reserve on a guided walk and talk.

Lambert Park was hit hard by last year's floods – the new plantings will go a long way towards helping it recover from the damage.

Mount Nelson Bushcare legend Greg Kidd helped guide the planting efforts while experts Andrew Hingston from Lambert Gully Bushcare and University of Tasmania Avian Club members Andi Magnusson and Peter Vaughan led the guided walk and talks on local bird life.

Deputy Lord Mayor Helen Burnet and Councillor Bill Harvey pitched in with the tree planting and rubbish collection.



Deputy Lord Mayor Helen Burnet puts in some new plantings with Maisie Tully, Georgina Lamprill, Christina Koerner and Landcare Tasmania CEO Rod Knight.

The students did a fantastic job and loved working with Bec Johnson from the Bushcare team. Bec gave the students plenty of planting tips and helped them identify weeds.

The students are part of the Mount Carmel College Environment Group and are active members of Landcare Tasmania.

Lambert Park is just a block away from the school, which will continue to involve its students in nurturing this site through regular maintenance.

Thanks to everyone who helped out on the day, including the students, teachers, volunteers, council members, Landcare Tasmania and the Bushcare crew.

It is so good to see young people helping to protect Hobart's bushlands, and happy to get their hands dirty in the process!

Weed Watch



You may not have encountered this weed in Hobart but if you've lived in the UK it's a fair bet you've seen it gracing the covers of tabloid newspapers. Native to south-east Asia, Japanese knotweed (Fallopia japonica) is feared as a plant capable of growing through the walls and floors of houses, spreading metres underground before surfacing between cracks in concrete and asphalt. In the UK it has led to precipitous drops in house prices, and mortgage brokers reluctant to give wouldbe house buyers loans in knotweed-infested suburbs.

In Tasmania, most populations

are known from the north, but plants have been found (and treated) in inner city Hobart. Japanese knotweed can invade a broad range of environments, moving into wetter, shadier areas and pushing out other plants. It can be identified by its hollow, bamboo-like stems, which become speckled with age, and its large leaves with pointed tips, which die back over winter. It can spread from root fragments, so you need to be very careful controlling it.

If you think you may have this weed in your garden, please let us know – email a photo of your suspect plant to: Bushcare@hobartcity.com.au.

Bandicoot Times

CITY OF HOBART

Prepare now for bushfire season

The City of Hobart is urging residents living adjacent to bushland reserves to cut back fire-prone vegetation between their property and reserve boundaries in preparation for an early bushfire season.

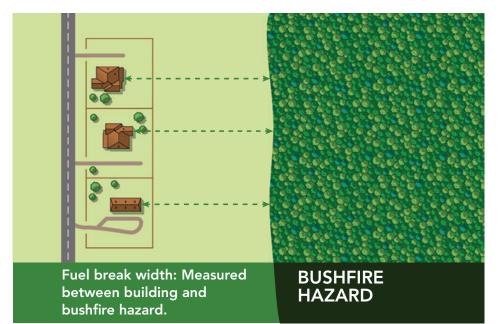
The City recently upgraded green fuel breaks near the entrance to Wellington Park, bringing the total amount of fuel breaks separating residential dwellings from forest edges across Hobart to 50 hectares.

Green fuel breaks create a buffer zone between the forest edge and nearby properties, in line with the Tasmania Fire Service's guidelines.

'We've done everything we can to protect people and their properties from bushfire,' the City's Manager Bushland John Fisher said.

'If our fuel breaks are to be effective, individual property owners need to do the same thing on their side of the fence.'

Fuel breaks are designed to be effective in bushfire conditions rated from Low to Very High. Residents are reminded that in Severe or Catastrophic bushfire conditions, leaving early is the



safest option for survival.

It is never too early to prepare for the bushfire season. The best time to check your property for fire hazards is when there is no fire threat.

To comply with the Tasmania Fire Service guidelines, residents should:

• reduce bushfire fuel levels around homes and buildings, particularly where they adjoin bushland

- not dispose of garden cuttings in nearby bushland – this increases the bushfire risk
- not plant vegetation in, or adjacent to, an existing fuel break. Plantings hinder the effectiveness of the fuel break and will be removed.

Please do not trim or remove any vegetation from fuel break areas.

For more information on preparing for the bushfire season visit the Tasmania Fire Service website at: fire.tas.gov.au.



GOLDEN SECATEURS AWARD 2019

NOMINATE YOUR FAVOURITE BUSHCARE LEGEND

The Bushcare Legend Golden Secateurs Award is given to a Bushcarer who has made a positive and lasting impact on Hobart's bushland and inspires others to contribute to caring for Hobart's bushland.

- To nominate your Bushcare legend for this year's awards email **bushcare@hobartcity.com.au**.
- Nominations must be submitted by Friday 8 November, 5pm.

Bushcare Legend Golden Secateurs Hall of Fame

2018 – Janet Stone 2017 – Gavin Wright 2016 – Astrid Wright 2015 – Ingrid Colman 2014 - Greg Summers 2013 – Andrew Hingston 2012 – Greg Kidd 2011 – Sue Gillespie

2010 – Peter Franklin 2009 – Sue Drake 2008 – Tony Ault



