### BANDICOOTtimes







#### **Bushcare Roundup**

Claire Knowles
Bushcare Coordinator

Pe've had an amazingly productive spring with so many working bees across our bushland reserves.

We've held 188 Bushcare working bees, welcomed more than 200 new volunteers and completed over 3000 hours of work, and that number doesn't include individuals working alone, convenors' hours and special events.

The Lambert Gully Bushcare group has proved the importance of hard work and consistency in tackling weeds, and is celebrating the successful control of a red-hot poker hotspot after many follow-up working bees. How good is that?

What's the next problem weed on the horizon? If you ask Bushcare team leader Sonya Stallbaum and the Mount Nelson Bushcare group it's bulbs and lilies. The group is seeing daffodils and arum lilies spreading and steadily multiplying, sneaking into bushland.

For our Waterworks Valley Landcare group it's foxglove, and they are not the only group seeing foxglove outbreaks that will require ongoing attention. Foxglove likes disturbance, wet forest and riparian areas. These poisonous weeds are broadly despised for their exponential invasiveness.

A weed risk assessment conducted by Tasmania's Department of Natural Resources and Environment earlier this year recommended all species



Volunteer Claire Dollan tends to native plants at a Hobart Rivulet Bushcare working bee.



Cornelian Bay volunteers Judy Boon, Tony Barrett and Richard Howroyd model their new Bushcare hats.

of the Digitalis genus should be Declared Weeds under the state's Biosecurity Act. The exception would be the sale of sterile varieties that won't invade bushland parks and reserves.

We had yet another wonderful end-of-year gathering for Bushcare at Legacy Park, where Bruce Champion, a long-term Friends of Knocklofty volunteer, was awarded this year's Golden Secateurs Award to acknowledge his contribution to community through Bushcare.

We also acknowledged the incredible contribution the late Professor Jamie Kirkpatrick made to the study and conservation of our rare native grasslands on the Queens Domain. His guidance informs our management today and he leaves an incredible legacy for nature conservation.

#### **Bandicoot Times**

And lastly, the Bandicoot Times is moving from print to digital stories on the City of Hobart's news portal, Hobart News. We will still send out the Bandicoot Times by email, and share more stories through social media, so make sure you sign up for Hobart News at hobartcity.com.au/subscribe.



Cover photo: The Fossil Giant, a huge stringybark and one of the largest trees still standing in the foothills of kunanyi/ Mt Wellington.

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## Champion in name, bush champion by nature

Bruce Champion knows most of the ridgelines, hills and gullies of Knocklofty Reserve like the back of his hand.

He knows its tracks and trails, and most importantly for the Friends of Knocklofty Bushcare group that cares for this unique bushland reserve, he has a deep understanding of its native plants.

The recipient of this year's Golden Secateurs Award, which honours an outstanding contribution to nature by a City of Hobart Bushcare volunteer, Bruce's connection to Knocklofty Reserve stretches back more than 20 years.

His involvement started during a chance encounter with a work colleague at Salamanca Market.

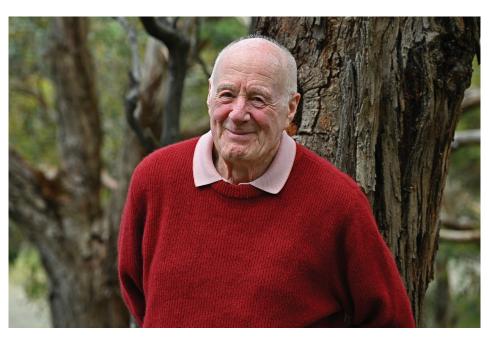
"I was a good friend of the original Friends of Knocklofty coordinator, Tony Ault," says Bruce. "He said the Friends of Knocklofty Bushcare group needs a plant person to help us recognise what are good plants and what are weeds in the reserve.

"I went and joined the group, and I've been with them now for about 25 years."

#### Sharing knowledge

Bruce is a skilled native plant propagator and the Australian Plant Society Tasmania Hobart Group nursery coordinator at their Kingston Primary School nursery.

Once a year the group holds a special plant walk and talk in Knocklofty Reserve, which Bruce has been conducting. Bruce particularly loves helping children develop an interest in native plants and the wonders of propagating.



This year's Golden Secateurs Award winner Bruce Champion. Photo: John Sampson

He's shared a huge number of achievements with the Friends of Knocklofty Bushcare group, including the creation of the frog pond, the bandicoot corridor, helping rid the reserve of huge walls of gorse and creating directional and interpretation signs that tell the story of the reserve, from both cultural heritage and natural heritage perspectives.

"I get a great deal of joy just walking through the bush," says Bruce. "I get joy from seeing it without gorse, without Spanish heath, without broom."

The work caring for the natural values of Knocklofty Reserve is far from over. Yes, the group has made incredible achievements in bringing the urban bushland reserve back to life by ridding it of highly invasive environmental weeds, but threats remain.

"Forget-me-not is spreading through the bush at a fantastic rate," says Bruce. "It's just like gorse, it smothers the ground and stops other little native plants from growing."

Bruce is also deeply troubled by the impacts of climate change on Knocklofty Reserve's native plants, impacts he has watched grow.

Places once rich in native orchids and heath are now drying out and becoming bare patches of earth. The impacts of climate change are very real to Bruce. He sees it in the drying of the land and increasing number of dead and dying trees.

And yet Bruce remains hopeful about the role of Bushcare.

"If you join Bushcare you learn how to maintain an area weed free. Weeds smother small plants, they smother young and tall plants.

"If you're part of a group taking weeds out of that equation you're helping young small plants grow into bigger, taller plants and trees, becoming an important part of the bushland around it."

# WALKING WITH GIANTS

Big tree enthusiast **Yoav Daniel Bar-Ness** is fascinated by Hobart's landmark trees and wants to share his knowledge and enthusiasm for our forest giants with the world.

he Styx Valley. The
Florentine. Tyenna Big Tree
Reserve. Tahune Airwalk.

These places draw people who want to see Earth's great and mighty trees. They travel to these sites from Hobart, other parts of Tasmania. Australia and the world.

And yet right here in Hobart we have trees just as inspiring. They reach to the sky from Waterworks Reserve, the foothills of kunanyi/ Mt Wellington, Knocklofty Reserve and the Queens Domain.

And all of them have stories to tell for environmental scientist Yoav Daniel Bar-Ness, who has been fascinated by big trees since first seeing the California coastal redwoods as a kid in San Francisco.

When Yoav looks at a big tree he sees stories of the landscape and people stretching back hundreds, if not tens of thousands of years.

And when he takes people to meet Hobart's forest giants he unlocks a world most of us take for granted.

#### Down by the water

Yoav likes to start his tour of Hobart's landmark trees with a short drive from the city to Waterworks Reserve. And there it is, at the end of the car park, a stringybark of giant girth and with a massive, muscular root snaking its way along the car park edge.

"This giant tree is an individual," says Yoav. "It's got its own life story. And because trees grow in relatively predictable ways, if we know a little bit about stringybarks, we can try and figure out a little bit about its backstory."

#### Fire tree

We walk a couple of hundred metres along the walking track towards Gentle Annie Falls before Yoav stops again. Just below sandstone cliffs stand two more stringybarks.

If you stop and look you can see signs of past fires.

"We can use those signals of past fire to give us a start in understanding some of the history of this particular place," says Yoav.

"The tree right next to me, this stringybark, has clearly survived a fire, as indicated by the black marks on its base."

If you look up the tree has only a few branches on it. Yoav thinks it is being dominated by the much larger stringybark behind it.

"It's the suppressed trees that have the interesting gnarly bits, the signs of decay where biodiversity and wildlife likes to live," he says.

"They also have more charisma because they have a more difficult and challenging story to tell."



Yoav Daniel Bar-Ness next to the giant blue gum in Waterworks Reserve. Photo: John Sampson

#### Big blue

We walk back out towards the reserve's historic Receiving House, which once channelled water from the mountain into the nearby reservoirs. In front of it, its leaves and branches reaching towards the upper reservoir, is a blue gum that stops us in our tracks.

"This is a beautiful, beautiful Tasmanian blue gum," says Yoav. Eucalyptus globulus is one of the biggest and tallest trees on the planet, and Tasmania's state floral emblem.

Yoav studies the tree. Although it's gigantic, it's not a forest relic.

"My hunch is this blue gum naturally sprouted after they built the waterworks here in the 1840s or 1850s, and the open skies and proximity to water have allowed it to reach a phenomenal size. "The local wildlife has created a natural grazing lawn beneath the blue gum, and they are chomping on any new saplings, reducing natural competition that could take resources away from this giant tree."

We look closer at 'big blue'. It is so healthy its branches are as wide in girth as the trunks of other fully grown trees nearby.

"Look at that mega branch," says Yoav. "It forms a large outstretched arm and you can see compression ripples on its lower surface.

"The tree and branch are both growing and expanding at the same rate evenly, and where they meet you get these fascinating and beautiful compressions, like waves of wood underneath the branch."

#### Witness tree

We drive out of Waterworks Reserve and turn right towards Ridgeway. Within a couple of hundred metres Yoav pulls into a ditch on the side of the road.

In front of us, perched on top of a ledge carved from the dirt stands an old, gnarly stringybark.

Yoav calls it a witness tree.

"A witness tree has observed something happening in history, survived it and has a story to tell," he says.

"My hunch is this is a veteran tree pre-dating European clearing of the land, and is very much a product of Aboriginal fire management from earlier times.

"You can see it's survived a recent fire that hollowed it out at the bottom and there have definitely been lots of vehicles that have



pulled up onto this clearing and scraped away the soil.

"When I look at this tree, I see it as a witness to the changes in caring for country that have happened since European colonisation.

"This is possibly one of the easiest to access, most interesting dry land stringybark veteran trees I've ever seen.

"People pass it every day and never stop to take a look but I think this is truly a bit of natural heritage. More experienced eyes than mine could look at it and see other links back to Aboriginal land management."

#### **Fossil Grove**

We are standing in a gully at the start of Main Fire Trail where it meets Strickland Avenue.

Clearly Yoav has saved the best of his grand tour for last. And like the other forest giants, these two are in plain sight.

Two tall trees, sentinels of the forest, stand in front of us on either side of the gully.

The first, Fossil Giant, is named for the geological layer on which it sits. Almost every rock you turn over has etchings of ancient marine fossils frozen in time.

"This is the Fossil Grove, and this is the Fossil Giant," says Yoav.



This stringybark grows on sandstone rocks with fossilised remains of delicate lace-corals and shell-like brachiopods from 250 million years ago. While not quite as old as the fossils, this tree has stood in place for centuries, its stem hollows and broken branches providing habitat for the creatures of the mountain.

"It is a *Eucalyptus obliqua*, known to Tasmanians as stringybark or to the Victorians as a messmate.

"And this is really one of the biggest trees this low down left on the mountain.

"It took us two minutes to walk in here from the road. It's in Wellington Park, and I think this Fossil Grove is really one of the best places to introduce citizens and students and visitors to Hobart's amazing giant trees."

The second tall tree in Fossil Grove stares back at us from across the gully. It is a veteran blue gum but unlike the blue gum in Waterworks Reserve that has been blessed with ideal growing conditions, this one has had a hard life, its story writ large across exposed roots, branches and a hollowed out base, large enough for a person to walk through.

"Most of Hobart's ancient blue gums have made way for farmland, housing and to build the city, and yet here, somehow, we have this ancient surviving veteran, one of the last surviving veteran blue gums this low down on kunanyi / Mt Wellington.

"Look at it. It's weird and complicated, and I don't know of any other blue gum this low down on the mountain that has such a huge, hollow base.

"The branch structure is twisted and gnarly. It is clearly a survivor of several fire events and it has an incredible story to tell if you take a moment to listen."

#### Big trees in our own backyard

"We're really lucky in Hobart because we have so many big trees in our backyard, literally within sight of the city," says Yoav.

"We've got different forest types that are found nowhere else in the world. We've got examples of some of the very largest and tallest trees in the world, and it's just right here waiting to be visited."

## Ending a stranglehold on our rivulets

obart's rivulets are home to some incredible and elusive aquatic wildlife.

Our platypuses have captured the hearts and minds of locals and visitors, but our rivulets are home to so much more life, including waterbugs and native fish like our small galaxias.

But unwelcome in our rivulets is the widespread presence of crack willow, an environmental weed harmful to native aquatic wildlife and the ecology of our rivulets.

Crack willows are a highly invasive and destructive tree that have taken over parts of our rivulets, pushing out native trees and shrubs and smothering embankments and rivulet bottoms with their thick, matted roots.

For too long they have been allowed to take over our waterways, putting ecological pressure on native aquatic wildlife and threatening important stormwater infrastructure.

#### Rewilding our rivulets

Now the stranglehold crack willows have on our rivulets is about to end.

The City of Hobart has just started work on a \$1.1 million, three year project to eradicate crack willows from Hobart's rivulets.

It is an audacious goal, but with careful planning and ongoing follow-up it is possible.

The first phase will focus on the Hobart Rivulet. We have already mapped out the crack willows infesting this inland waterway, and have started the removal process.

In some cases that involves handweeding, but where big trees that



City of Hobart environmental scientist Dan Rhodes pulls up a huge mat of willow roots from the Hobart Rivulet. Photo: John Sampson

threaten critical stormwater are concerned it will mean chainsaws and heavy equipment.

The project will help rewild Hobart's rivulets by removing destructive crack willows and replacing them with native habitat.

It will also eliminate the threat these willow trees pose to critical stormwater channels – their fallen limbs can block the stormwater system, leading to damaging flood events further downstream.

Launching the project Hobart Lord Mayor Anna Reynolds warned crack willows are smothering our rivulet beds, reducing oxygen available for fish and other aquatic wildlife and making it hard for platypuses to forage for food and create burrows.

"We know that weather is becoming more extreme, rainfall events are becoming more extreme, and having those flash flooding events is a risk to Hobart," Cr Reynolds said.

"The clearing of these environmental weeds will mean that our waterways can flow more naturally, which is good for reducing the risk of flash flooding.

"Crack willows choke inland waterways, with their thickets and fallen branches causing major flooding and bank erosion, and increasing the risks to homes, businesses and infrastructure during major flood events."

This project is a step in the journey to rewild Hobart's rivulet system, improving the environment for our platypuses and providing better protection for the community during major flood events.

It is equally funded by the City of Hobart and the Australian Government through the Disaster Ready Fund and administered by the Tasmanian Government's Department of Premier and Cabinet.

