



Wallumetta

The Newsletter of Ryde-Hunters Hill Flora and Fauna
Preservation Society Inc.

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PRESIDENT'S NOTE

The New South Wales Government recently announced an energy infrastructure road map that it claims will replace four out of five of NSW's ageing coal-fired power stations, build Australia's first renewable energy zones in the Central West and New England and attract \$32 billion of private investment in regional energy infrastructure.

This is at a time when the NSW Government is funding road infrastructure in the form of Westconnex, Northconnex, the Western Harbour Tunnel and Warringah Freeway upgrade to the extent of a very similar amount. Whether it is private capital or government funds, there are only finite resources and investing in one project comes at the cost of resources available for other projects. This is known as opportunity cost.

At the same time, the COVID-19 pandemic has led to a dramatic increase in people working from home and a consequent decrease in traffic volume on the city's roads. According to the on-line journal *The Conversation* (16 November 2020): *'The increase in working from home turns out to be the best policy lever the transport sector has ever pulled for reducing traffic congestion in our cities.'*

The authors of the article began looking at the impacts of the increase in working from home on our roads and public transport from March to September and found a 10-15% drop in peak-period congestion. That's similar to traffic during school holidays. COVID-19 has done something that government has not been able to achieve – cutting road congestion almost overnight. To capture the benefits of this shift on our roads, government needs to play a role. If the NSW Government had acted to reduce traffic demand, such as encouraging working from home, in place of investing billions in expressways, those billions would be available for our pressing environmental priorities.

*Frank Breen,
President*

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The Importance of Urban Trees

By Natalie Parletta, adjunct senior research fellow with the University of South Australia, published by *Cosmos: the Science of Everything*, 1 October 2020

When thinking of tree conservation, sprawling forests generally come to mind. But cities, although covering only 2% of land globally, could harbour a sixth of the world's tree diversity, according to Australian researchers.

And among the more than 4,700 tree species they counted, one in 10 faces conservation risk in the wild. Six are even thought to be extinct.

“Urban areas represent an overlooked opportunity for plant conservation globally,” says lead author Alessandro Ossola from Macquarie University.

“Our study suggests that meaningful biological conservation of plant diversity can be done on our very doorsteps – in our suburbs and home gardens. We can transform our entire cities into rich botanic gardens where everyone can help by saving plant species from the global extinction crisis that biodiversity is facing.”

After settling towns and cities, our ancestors imported and bred new cultivars and varieties of trees for both aesthetic and practical purposes, and these remain with us today. But they have been overlooked, according to Ossola. “Despite this rich history, we know surprisingly little about ‘tree life’ in the city and how [urban] trees cope with climate change,” he says.

To understand which trees are planted in cities around the world, and the climates and natural habitats they face, his team conducted an ambitious inventory as part of their [Which Plant Where](#) project. They discovered a wealth of data on trees in cities and towns, systematically mining nearly 13 million tree planting records from 2010.

Their search included “trees” in different languages, including “arboles” in Spanish, “alberi” in Italian, 树木 in Chinese, and information from dedicated arborists, compiling a collection of tree data for nearly 500 urban areas.

“Like kids going crazy for the latest collectible, it was difficult to stop,” says Ossola. “We wanted more. It was fun to discover a new place on the world map dotted with trees.”

Tree conservation status was determined via the International Union for Conservation of Nature and invasion potential from the Global Register of Introduced and Invasive Species.

In the cities investigated, four tree families contributed more than a third of species richness – legumes (*Leguminosae*), myrtle (*Myrtaceae*), palms (*Arecaceae*) and roses (*Rosaceae*).

Other large families with myriad species populating cities include pine trees (*Pinaceae*), conifers (*Cupressaceae*), araucarians (*Araucariaceae*) and birch trees (*Betulaceae*). On the other hand, only 78 out of 4719 species were found from the flowering *Rubiaceae* family.

More than 60 tree species found in urban areas are deemed “critically endangered”.

Preliminary estimates suggest some tree species could be lost due to low heat tolerance, reduced rainfall or more extreme weather events.

But it's not all bad news. Results suggest other tree species could thrive, even under future climates. The researchers note the database could help inform appropriate species selection and avoid potential invaders in efforts to green cities and conserve biodiversity.

From Ian Darbyshire, Foundation for National Parks & Wildlife (FNPW):
Australia lost over 12 million hectares in the last summer's bushfires.



And almost 3 billion animals died or were displaced. Images of raging fires, devastated bushland, farms, national parks and wildlife are still vivid for many... and this was followed by COVID-19.



In April, FNPW announced a national project to plant a million trees in the National Bushfire Recovery Nursery project. It will support restoration projects across South Australia, Queensland, Victoria & New South Wales over a period of 3 to 5 years. These nurseries will grow tree species and wildlife habitats lost in the bushfires and will regenerate areas that were damaged. The project has already commenced at sites within identified FNPW bushfire recovery priority regions in ACT, NSW, and SA. Tree planting will restore damaged habitats and assist in restoring lost habitat for native species. The project will support threatened species including the Glossy Black Cockatoo, Scarlet Robin, Swift Parrot, Yellow-bellied Glider, Western Pygmy Possum, Bitter Bush Blue Butterfly and the Koala.

The National Party's Koala-Killing Local Land Services Bill

After the horrific year for koalas and nature we're ending on a highlight, thanks to people power...

A few weeks ago a fairly innocent-sounding *Local Land Services Amendment (Miscellaneous) Bill* was introduced to the NSW Parliament. It seemed innocuous, so the National Party bill passed the Lower House where not a single Liberal MP even spoke to it.

But the [Environmental Defenders Office](#) (an organisation we support) looked at it and confirmed everyone's fears: if this bill were to be passed, it would be a disaster for koalas and their habitat.

To kill this bill in the Upper House would require Labor and progressive crossbench MPs to join with the Greens, plus one more vote, to block it in the Upper House.

So the word went out to koala-lovers. Overnight more than 10,000 sent emails to Upper House MPs; so many that the parliament's server was overloaded and out of action for an entire day. The bill was supposed to be introduced and voted on in the Upper House - but it was delayed.

Then there were whispers of division inside the Government. Key MPs were being inundated with phone calls, begging them to stand up for koalas and vote against the bill in the Upper House. And it was reported by Channel 7 that a Liberal MP had told her Party Room colleagues that she would cross the floor to vote against the koala-killing bill! So the bill was further delayed...

Emails kept flowing in, there were dozens of protests across the state as part of our Save Our Koalas Week of Action, and the phone calls continued.

The National Party finally brought the bill forward on Thursday 19 November 2020 and Liberal MP Catherine Cusack dropped a bombshell on the floor of parliament: she couldn't support the bill and referred it for inquiry to the same committee that had recently reported that koalas in NSW would be extinct before 2050 without urgent action.

That night's win was great, but there is more to do to protect the natural habitat of koalas and other Australian fauna and flora.

Solar Citizens Survey Results

In July Australia pushed past 2.5 million rooftop solar installations. It should be no surprise then that 89% of our solar-loving community live or work under a solar rooftop. For 44%, their system paid for itself in full and continues to cut bills, and 56% are looking ahead to add battery storage.

These are impressive numbers, but there's no question that there's a big job ahead of us to secure a sunny future for every Australian. Summarised results from respondents to the survey are:

- There are 132000+ Solar Citizens across Australia
 - 89% have solar on their home or workplace
 - For 35%, solar has reduced their electricity bill by over 70%
 - For 44%, their solar system has already paid for itself
- Solar Citizens are looking to the future...
 - 54% installed solar to reduce their environmental impact
 - 15% already have a battery storage system
 - 56% are interested in adding battery storage to their solar panel system in the next 12 months
- But there are challenges ahead...
 - 34% have had their energy consumption increase due to COVID-19
 - 47% are concerned about their electricity supply being affected by extreme weather this coming bushfire season
 - 9% reported having their solar or battery exports limited by networks



Investing in solar is a no-brainer. Right now, our state and federal governments need to listen to the community and support clean energy programs on the road to economic recovery.

But as well as recovering, we also need to protect what we have. In our solar census, 44% report being dissatisfied with their solar feed-in tariff, which is exactly why we've campaigned against rates dropping in Western Australia and Victoria and against plans for more charges on solar exports – with over 10,000 people taking action.

Nearly 10% of solar owners are facing export limits imposed by networks, and Solar Citizens have been calling for better voltage management by the networks and for solutions that don't discriminate against solar households and businesses. [*'Energy regulator could force you to switch off your solar panels'*, ABC 7.30, 20 May 2020.]

And solar system owners may now opt to purchase and use safe, low-cost zinc-bromide battery technology, a much cheaper and safer technology than lithium ion batteries, developed at the University of Sydney Nano Institute, by Professor Maschmeyer and his team. The platform, "Gelion Endure" is based on the safe, low-cost zinc-bromide battery technology, developed by Professor Maschmeyer. This novel technology will provide a scalable method to store renewable energy. The company plans to launch the system into the \$70 billion global energy storage market." For more details see <https://www.sydney.edu.au/news-opinion/news/2019/02/27/gelion-batteries-to-help-power-the-renewables-revolution.html>

The solar census shows that the vast majority will vote for a party that will make solar more accessible and affordable, mandate a fair price on solar, and champion the vision to transition to a clean energy future.

Why Don't Australian Politicians Support Renewable Energy?...

[Source: Market Forces - <https://www.marketforces.org.au/>]

The Australian government spends billions of dollars of our money each year on programs that encourage more coal, gas and oil to be extracted and burned. Market Forces estimates that [tax-based fossil fuel subsidies](#) cost over \$12 billion a year federally. This includes subsidies that support both the production and use of fossil fuels.

But tax-based subsidies aren't the only government financial backing for fossil fuels. Direct [handouts and contributions](#) to the industry are doled out at both federal and state levels. On top of this, [public money](#) is used to finance fossil fuels through our national export credit agency EFIC (*Export Finance and Insurance Corporation*), as well as our involvement with international financial institutions.

Meanwhile, funding for renewable energy research dwindles...

...Could this Help Explain Why?

In November 2015, the NSW Government offloaded Vales Point Power Station — an old, polluting coal-fired plant on the shores of Lake Macquarie — **for \$1 million**. Suburban homes sell for more!

Fast-forward to 8 Oct 2020, and the 42-year-old Vales Point coal-fired power station is valued at **\$730 million** and set to receive **\$8.7 million in public funding** for plant upgrades, despite criticism that the funding is both unnecessary and could ultimately be used to increase the use of coal.

The 1,320MW Vales Point power station is owned by Delta Electricity, which in turn is primarily owned by businessman and **Liberal party donor** Trevor St Baker, and is set to receive the funding after it was included in the [federal budget delivered recently](#).

See <https://www.abc.net.au/news/2017-10-24/coal-power-station-sold-for-peanuts-becomes-730-million-asset/9077582>

Across the Ditch:

Tranzit Coachlines in Wellington, New Zealand, now operate ten of these battery-powered double-decker buses. The pantograph on the back rises to plug into a fast charging station. And 31 more electric buses are on order.

New Zealand's electricity is already over 80% renewable.

Wellington had a trolleybus system which was over 60 years old - the last and largest in Oceania. Controversially, it was closed down a few years ago and replaced by diesel buses. If only they had kept it going a few more years...



NEWS FROM THE FIELD OF MARS

Cemetery Works: Another Disaster!

Work continues within the eastern boundary of the Field of Mars Cemetery where more crypts are being built, and in the October 2020 edition of Wallumetta we reported chatting with the staff of Northern Cemetery and their contractors, hoping that they will be mindful of the necessity to avoid damaging the Reserve.

So we didn't expect to see this! A vehicle, presumably a work truck, knocked down the protective fence and shrubs behind. Less than a week before this happened, we were weeding the area and nurturing plants which are now destroyed.



Photo by Pamela Ward

And there was no excuse for it: the cemetery road is wide here, and near a T junction where the largest of trucks could turn around... or simply drive on because the cemetery roads loop around. Location is where we reported the dog mess last month; you can see the signpost on the right.

Cemetery Creek 2 Bushcare Group repaired the fence, replacing the star pickets which had been knocked over and securely tying the wire to the pickets. Some weeks later, another part of the fence was damaged where left-over wet concrete was dumped against it; this we also repaired.

Turkey Travels

The Monash Road Bushcare site turkey mound was built by a brush turkey we named "Basil" ... and we reported in previous years that "Turk" who lived around the Visitor Centre, had his mound at the Visitor Centre Bushcare site beside the Warada Track on the flat grass area across the creek. Turk is identifiable because he was tagged with the number 75 by Sydney University researchers. This year, Turk's mound has been inactive, but he turned up at Monash Road using Basil's mound! This is possibly because Roast has taken up Turk's former territory, even though his mound is in a different spot. We don't know where Basil has gone, but hope that he has also simply relocated further along Buffalo Creek.



Ducks...

More families of ducklings have been spotted around the Visitor Centre; most recent being a family of 7 ducklings. Because of eels and other predators around, natural attrition usually occurs but fortunately in recent months there has not been any devastation caused by dogs.

... and Turtles

Visitors may be rewarded with the sight of Eastern Long-Necked Turtles (*Chelodina longicollis*) sunning themselves around Buffalo Creek. One was spotted laying eggs near the Environmental Education Centre; the area is being protected so the eggs are not dug up by foxes, or the ground mown down or compacted, making it difficult for hatchlings to emerge.



Photo by Jasmine Winsley

Australian Longfinned Eels (*Anguilla reinhardtii*)

There have been large eels living in Buffalo Creek, often seen near the Boardwalk, but sightings have also been reported upstream from Buffalo Road. It is probable that these eels are Australian Longfinned Eels which can grow to over 1½ metres long, weighing over 20kg at that size. They are not aggressive, and have very short, platelike teeth, so are of no danger to humans. These eels feed on insects, small fish and young birds. And they have a remarkable life-story.



Photo by courtesy of Fishes Australia

Australian Longfinned Eels live in freshwater and estuarine areas. They can breathe out of water, making overland travel possible (if a little clumsy), which they often do when they breed - only once. It is the last thing that they will do before they die. They leave their home and journey to the warm waters of the Pacific Ocean. Spawning takes place in extremely deep tropical water in an ocean trench up to 10 kilometres deep, found at the edge of the ocean shelf surrounding New Caledonia.

Born into salt water, the eel larvae (*Leptocephali*) look a bit like see-through gum leaves. They use the Pacific Ocean currents to drift towards the east coast of Australia. By this stage the larvae have grown into a more eel-like creature called a glass eel. In the estuary, the see-through camouflage is no longer needed so their bodies take on colour and the glass eels become elvers. It takes 20 to 80 years for them to reach maturity and make their once-in-a-lifetime journey to New Caledonia.

Visitor Centre

We still see large numbers of people passing by, with the daily count often over 100. Many come to the Centre for information but usually remain out on the veranda because, in accordance with our COVID Safe Procedures, visitors must write down their contact details if they venture inside. We often replenish supplies of track notes and maps; over 200 maps were taken in two months. The “What’s in a Name” and “Birds in the Field of Mars” leaflets are popular, too.

Field of Mars Plan of Management

The process of review/update continues for the City of Ryde Open Spaces Plan of Management, and the Field of Mars Plan of Management (as reported in October). Several members made submissions and so did our Society management committee on behalf of members.

Consultants are now awaiting sign-off by the NSW Government which must occur before these documents go on public exhibition. After this happens and comments are received, the documents will be adjusted and finalised with the end date of the process being by 30 June 2021.

Win this bright Yarnknit* rug!

Tickets \$2 each / 3 for \$5
available at the Field of Mars Visitor Centre.

* Hand-knitted and kindly donated to RHHFFPS by
the Holy Spirit Yarnknit Group of North Ryde.

Raffle will be drawn at our next Annual General Meeting.



EVENTS

Past Events:

On Sunday 18 October our resident bird expert Cathy Goswell led COVID-safe **Spring Birdspotting Walks**. We limited the numbers on these walks and, because of popular demand, two more walks were scheduled and held a week later.



Recently, we also held a **Wildflower and Weed Walk**. There was not so much popular demand, but we sent a special invitation to City of Ryde Councillors and Cr Edwina Clifton was among those who came along. The group appreciated what they saw, and were interested in the stories surrounding weeds.



Unfortunately, the walk was severely cut short because of the sudden arrival of a rainstorm. Luckily we had a few minutes' warning and made it back to the Visitor Centre veranda in time, but with rain forecast to last another 45 minutes, we abandoned hope of resuming the walk. Those who came were interested in a return visit for a similar walk and other events next year.

Coming Event:

End-of-year Get-Together for Society members

On Saturday 5 December 2020, join us from midday at the Visitor Centre.

We will light the gas for a COVID-Safe barbecue + salad lunch and chat... and maybe a bushwalk for those interested.



MEMBERSHIP renewals are due at the end of the year. Several members already paid in advance! **You do not need to renew your membership unless you receive a separate email or letter!** And thank you to all who have already paid membership for next year.

Not a member? Would you like to join us? Pay now for 2021!...

<p>New members always welcome!</p> <p>Financial members enjoy active involvement in our Society's activities to protect natural environments both locally and beyond, and receive "Wallumetta", our bi-monthly newsletter with news about environmental issues and events.</p> <p>Please pay by direct transfer to our Commonwealth Bank account: RHHFF PS INC GENERAL ACCOUNT 062171 - 0090 1574. Include your name in the transaction description, and email your name, address and phone number to rhhffps@gmail.com</p> <p>Alternatively, you may pay by cash or cheque: Complete and hand in this form with payment in a sealed envelope at the Field of Mars Visitor Centre or post to: RHHFFPS, PO Box 552, Gladesville 1675.</p>	<p>RHHFFPS Membership Application:</p> <p>NAME:</p> <p>Address:</p> <p>Phone:</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;">Annual Membership:</td> <td style="width: 33%;">Discount if receiving newsletter by email:</td> <td style="width: 33%;">\$</td> </tr> <tr> <td>Individual</td> <td>\$ 25 (-\$ 10)</td> <td></td> </tr> <tr> <td>Family</td> <td>\$ 45 (-\$ 10)</td> <td></td> </tr> <tr> <td>Concession (Students/Pensioners)</td> <td>\$ 20 (-\$ 10)</td> <td></td> </tr> <tr> <td colspan="2">Total Payment:</td> <td>Donation</td> </tr> </table> <p><input type="checkbox"/> Cash <input type="checkbox"/> Cheque <input type="checkbox"/> Electronic transfer</p>	Annual Membership:	Discount if receiving newsletter by email:	\$	Individual	\$ 25 (-\$ 10)		Family	\$ 45 (-\$ 10)		Concession (Students/Pensioners)	\$ 20 (-\$ 10)		Total Payment:		Donation
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