



RHHFFPS

Wallumetta

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

Website: <http://rydehffps.org.au/>

Member of the Nature Conservation Council of NSW (NCC)
and founding member of the Powerful Owl Coalition

No. 292

**FEBRUARY
2022**

We acknowledge the Wallumedegal, original inhabitants of the Ryde – Hunters Hill area.

PRESIDENT'S NOTE

In my note for the last issue of Wallumetta I drew attention to a report by the on-line daily, The Guardian (8 November) that Australia is likely to be releasing more emissions from deforestation than reported to the United Nations. In a subsequent edition (31 December 21) the Guardian reported a **Carbon Bomb**, with Queensland revealing a big jump in land clearing. The Guardian stated that *Queensland landholders are clearing the equivalent of about 1,000 MCGs a day, including endangered ecological regions, according to state government data.*

This is based on the [Statewide Landcover and Trees Study](#) (SLATS) for 2018-19 which showed landholders cleared 680,688 hectares of woody vegetation, or about 0.7% of Queensland's total.

This is a critical concern because the method used by the Commonwealth Government for assessing native vegetation cover understates the amount of land clearing.

Queensland's new dataset is three times more accurate than that used to compile the Commonwealth Government National Greenhouse Gas Inventory assessment. The Australian government has relied on its reporting of falls in land-clearing rates for almost all the reductions that allow it to claim the country's emissions have fallen by about one-fifth since 2005. In its [2021 projections update](#), the federal government predicted Australia's carbon emissions in 2030 would be 30% below 2005 levels. Clearly Australia's carbon emissions are not going to reduce based on the evidence of the Queensland Carbon Bomb.

The Wilderness Society reported (19 January 2022) that in past years, almost three quarters of the forest and bushland destruction in Queensland was for beef production — tearing down valuable wildlife habitat to stock more cattle. It's now more important than ever that the companies buying this beef, like supermarkets and fast food giants, source their products more responsibly, and move away from beef grown off the back of deforestation.

In another article The Guardian reports (19 December 2021) *Soil carbon sequestration on farms alone won't absolve our daily emission sins.*

Although [soil carbon sequestration](#) is front and centre in the government's plan to combat global warming the Guardian reports that our soils can only accumulate so much carbon. Soil carbon sequestration is governed firstly by soil type, secondly by rainfall and temperature, and finally by management techniques. In Victoria alone, soils range from sands with soil organic carbon (SOC) of about 0.5% to deep clays with SOC in the range of 1 to 2%.

Across the country, the bulk of our rain fed soils managed as broad acre agriculture have a sequestration limit of less than 4%. Essentially, you can't make a silk purse out of a sow's ear. You can't turn desert sand into peat moss.

The bottom line is, out in the landscapes beyond back yard veggie patches, farming communities can't turn sand into compost. It's time to get real about the expectations of carbon sequestration.

Frank Breen, President

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POWER OUTAGE: CLOSING POLLUTING POWER STATIONS COULD SAVE SIX MILLION LIVES.

Computer modelling shows that targeted shutdowns are the best solution.

From an article by Ellen Phiddian, published by Cosmos, 30 November 2021.

Retiring specific power stations around the world could save six million lives over the next 30 years, according to a team of researchers from Tsinghua University in China. A study published in



Liddell Power Station in the upper Hunter –from Market Forces

Nature Climate Change examined the health effects of individual power plants around the world, in regard to heat-related deaths from climate change and from air particle pollution.

The researchers used computer modelling to predict various different emissions, warming and policy scenarios between 2010 and 2050.

They found that the most ambitious emissions-reduction policies, combined with strategic shutdowns and replacements of the highest-polluting power plants, would avoid six million

deaths, as well as prevent 43 billion tonnes of carbon dioxide from entering the atmosphere.

These power stations, and deaths from pollution and global warming, are not distributed equally around the world. Between 2010 and 2018, around 92% of deaths related to power-plant emissions happened in low-income and emerging economies, including China, India and countries in Southeast Asia.

It's well established that climate change and air pollution are both detrimental to human health, and low- and middle-income countries are often the worst affected. Closing fossil-fuel-burning power stations is therefore going to have global health benefits.

But the modelling shows these benefits won't necessarily be maximised or reaped evenly, depending on which power stations are closed first and which are allowed to burn for longer.

Strategic retirements of the most-polluting and harmful power plants may ultimately determine the extent to which health co-benefits are realized.

REDBANK POWER STATION - News from the Nature Conservation Council (NCC)

We've already reported how taxpayer funds subsidise the continued operation of Vales Point Power Station at Lake Macquarie. ***Now, a company plans to burn native forests for electricity.*** Verdant Earth Technologies wants to convert an old coal-fired power station in the Hunter Valley to burn 850,000 tonnes of wood every year — they call it forest 'biomass'.

Over 30 organisations signed an open letter condemning the plan and, following submissions from many concerned ratepayers and environmentalists - including RHHFFPS members - Singleton Shire Council opposed the proposal. So the company took its proposal to the Land and Environment Court just before Christmas, to overcome the opposition of the local council.

On behalf of the NCC, Deputy CEO Jacqui Mumford attended court to tell how this proposal will destroy native forests and harm the climate, and argued that the application must be rejected.

See the NCC video presentation: <https://www.youtube.com/watch?v=01tEUaZNfi0>

Verdant's proposal, if approved, would require more wood than Forestry Corporation generates from its logging operations across the whole of NSW in an entire year. They plan to source this timber from anywhere within 300km of Singleton, threatening forests all the way to Grafton in the north and the Illawarra in the south. Conservation groups across the state are concerned about impacts from burning a million tonnes of wood every year - on forests and biodiversity, and the atmosphere and greenhouse gas emissions. There is also concern about the impact on roads subjected to tens of thousands more heavy truck movements every year, and with the probable expectation of subsidized diesel fuel costs.

Redbank will trigger the logging of thousands of hectares of our native forests each year.

Biomass proposals like Redbank could set back forest protection and climate action by decades and must be rejected. Burning trees for electricity releases enormous amounts of carbon dioxide and feeds climate change – a situation exacerbated by transportation of the raw fuel.



Each forest tree takes decades to grow but only seconds to burn in a power station furnace. The overall climate impact is arguably worse than coal, and the destruction of forests and all the animals that live there is devastating.

Protecting native forests and the carbon they store is one of the solutions to climate change. Destroying forests to burn for a few minutes of electricity is not a climate solution, it is environmental vandalism and must not be allowed.

The 2021 NSW parliamentary Inquiry into 'Sustainability of energy supply and resources in NSW' found forest biomass should not be eligible for renewable energy credits.

Another concern is that Redbank's wood burning 'technology' will emit particulate matter 2.5 (PM2.5), a pollutant so small and so dangerous it has no safe exposure threshold. The particles can penetrate deep into lungs, bloodstream and vital organs and are responsible for death and systemic illness at a population scale.

But local newspaper, the Singleton Argus, reported that the conversion of the Redbank power station from thermal coal to biomass appears to be endorsed by the Federal member for Hunter, Joel Fitzgibbon (ALP). In a spectacular failure to recognise environmental concerns he stated:

"This is an exciting project in support of the economy of the Hunter Valley. The additional 200 jobs during the conversion and re-commissioning phase of the power station, plus the 50 permanent operational jobs when the power station is re-commissioned will be most welcome. Plus of course there will be multiple jobs related to the logistics and transport of the close to a million tons a year of waste wood biomass that will provide the feedstock for this baseload power station."

Redbank Power Station closed in October 2014, leaving 39 full-time employees out of work. We support the transition of the Hunter Valley workforce away from coal mining and power towards providing renewable energy. This is not how to do it; this is how not to do it.

ACF TAKES TOONDAH WETLANDS DOCUMENT TRANSPARENCY FIGHT TO THE FEDERAL COURT

The Australian Conservation Foundation (ACF) is appealing the Australian Administrative Tribunal (AAT) decision to reject its Toondah Freedom of Information request to make documents public.

These documents will likely uncover what was said between the Walker Corporation (one of Australia's largest developers) and Australia's Environment Department about a massive proposed marina and high-rise apartment complex on the Moreton Bay wetland in Queensland.

Dylan Olliver said:

'We wouldn't be pursuing this if we didn't believe we had a strong case. We have received advice from one of the most experienced barristers in Australia and will be arguing that the AAT made a legal error in refusing to release the documents.'

'The decision sets an alarming precedent — that it's acceptable for government agencies to keep discussions with property developers hidden from public view.'

'The wetland is an area of international significance. This case is critical to protecting precious habitat — an internationally protected wetland, where right now turtles, dolphins, whales, dugongs and Eastern curlews thrive. We must do everything we can to protect them.'

'We know the Department recommended the project be refused outright because of the damage it could do to critical habitat. So now we want to know why the Environment Minister at the time ignored this advice and sent this project to the next stage of assessment. It's just not right — we, the community, deserve to know what went on!'



Photo by courtesy of EDO

'Our case is fundamentally about elevating the importance of transparency in environmental decision-making. Negotiations and information between elected representatives and developers should be made public, especially when they are also donors to political parties.'

'The wetland is listed under the International Ramsar Convention and is supposed to be protected by Australia's national environment law, the Environmental Protection and Biodiversity Conservation Act.'

'If, through a culture of secrecy, the Walker Corporation is given the go-ahead to destroy a large area of this wetland to make way for a marina and a massive luxury residential complex, it will set a devastating precedent for other protected areas, possibly even World Heritage Areas.'

'We will further highlight the need for a national environmental independent regulator, free from political interference.'

RAISING WARRAGAMBA DAM

We made a submission to the NSW Department of Planning, Industry and Environment to express our opposition to the proposal to reduce the impact of flooding in the Hawkesbury/Nepean Valley by increasing the height of the Warragamba dam by 14 metres.

The Environmental Impact Assessment (Chapter 21, p150 to 159) demonstrates that raising the dam wall will have a detrimental effect on the World Heritage area and the Aboriginal cultural heritage upstream from the dam, but page 190 the Task Force Assessment Report (January 2019) states that this will not prevent flooding of the valley.

The Task Force Assessment Report shows that there are alternatives that will not have an impact on the World Heritage Area and Aboriginal cultural heritage.

The Report states that the net benefit/cost of this proposal is \$58m (p108) as compared to \$165m from raising the dam wall by 14 metres. Reducing the

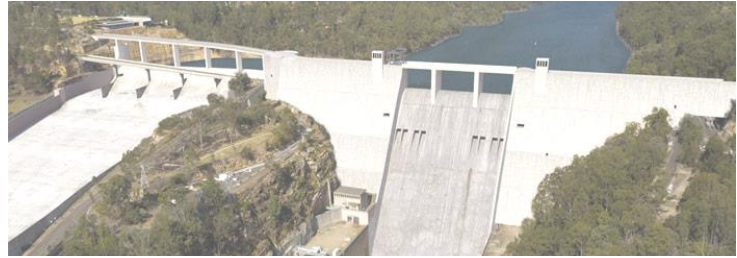


Image of proposal - WaterNSW

water level in the dam by 5 metres, with better management of water flows from the dam, will reduce the impact of flooding and avoid impacting the World Heritage Area and Aboriginal cultural heritage.

The amount of \$165m is overstated as the impact of this alternative on the World Heritage Area and the Aboriginal cultural heritage has not been fully considered. We note that the Environmental Impact Statement (EIS) is flawed in key areas including:

- Just three hours were spent surveying for koalas and one day spent surveying for platypus across 65 kilometres of watercourse that will be intermittently inundated by the raised dam wall.
- The extent of the inundation that will occur in the pristine Kowmung and Kedumba Rivers is seriously understated. This means that the certain environmental and cultural damage that would be done in their catchments is not admitted.
- Impacts to threatened species from dam inundation have only been considered for one quarter of the impact area (1,400 hectares of the 6,000 hectare impact area).
- No experts were engaged to undertake studies of the impact of the dam project on the Outstanding Universal Values for which the Blue Mountains national parks were originally placed on the World Heritage list.
- The NSW Government has refused to obtain the Free, Prior and Informed Consent of the Traditional Owners, the Gundungurra People, to the dam project.
- Just one quarter of the impact area has been surveyed for its Aboriginal cultural significance – which alone found over 300 significant cultural sites.

The net benefit/cost of raising the dam wall by 14 metres would be substantially reduced where the impact on the World Heritage Area and the Aboriginal cultural heritage is fully considered and valued.

We note that the Report takes into account an increase in the population and development in the Hawkesbury/Nepean Valley and this is reflected in the above benefit/cost figures.

There is a fundamental flaw in permitting further development and population in an area that is subject to flooding. Whatever the level, the suffering and loss still occurs when the flood arrives.

The only way to minimise this suffering and loss is to prevent further development and prevent further population increase in the flood prone areas. This is the most sensible course of action and would have the effect of closing the gap between the two benefit/cost outcomes.

Taking into account the understatement of the impact on the World Heritage Area and the Aboriginal cultural heritage of the proposal to raise the dam wall by 14metres and the benefit from avoiding further development and population increase in the valley leads to the conclusion that the most appropriate approach to mitigating the impact of floods in the Hawkesbury/Nepean Valley is to reduce the water level in the dam by five metres and to more effectively manage water flows from the dam. Such an approach would avoid any impact on the World Heritage Area and the Aboriginal cultural heritage and minimise suffering and loss from flood events.

In summary the most appropriate approach to minimise suffering and loss from floods in the Hawkesbury/Nepean Valley is to prevent further development and population in the flood prone areas, reduce the level of water in the dam by five metres and more effectively manage water flows from the dam.

SYNTHETIC OR NATURAL TURF?

Readers will recall the concerns we have with synthetic turf. Now there is some good news!...

"In the Cove", Lane Cove's Weekly Review 26.1.22 reported:



The Lane Cove Council held an extraordinary council meeting to discuss the future of Bob Campbell Oval (BCO) – a synthetic turf or an improved natural turf?

Lane Cove Council voted 8 : 1 to retain a natural grass surface at BCO. The only councillor to vote against the motion was Councillor Scott Bennison. The motion to review the BCO masterplan was tabled by three east ward councillors (David Brooks-Horne, David Roenfeldt and Merri Southwood). Despite the motion being prepared by all three east ward councillors, Scott Bennison fired away numerous questions at many councillors but did not request any comment or statements from David Brooks-Horne (both are Liberal party endorsed members of Lane Cove Council.)

The motion requires Lane Cove Council to submit a new Bob Campbell Masterplan with an upgraded natural turf oval. The new Masterplan will be developed by a working party which will include the Mayor, Lane Cove Council's General Manager, and representatives of the Greenwich Sports Club, resident's association and other members the Mayor and the General Manager appoint.

Prior to the meeting, Lane Cove's local member and Minister for Planning, Anthony Roberts, released a media statement advising the grant that had been obtained for the upgrade of BCO will remain in place and it is up to the community to decide the oval's surface which best suits the community's needs.

WILDLIFE RESCUE HANDBOOK

Have you ever come across an injured animal and wondered what to do?

The Foundation for National Parks & Wildlife has produced a rescue handbook.

You may keep it on your phone or print out a copy to keep in your car.

Click here to download:

<https://backyardbuddies.org.au/wp-content/uploads/2021/03/WildlifeHeroesWildlifeRescueHandbook.pdf>

Remember: The first 24 hours are crucial, so call a nearby wildlife care organisation straight away and follow their advice. Most have 24 hour hotlines, so don't just send an email; get help quickly!

For Ryde and Hunters Hill, local wildlife rescue organisations with 24/7 response are:

- Sydney Wildlife Rescue – phone (02) 9413 4300 – based in Lane Cove National Park
- WIRES (NSW Wildlife Information, Rescue and Education Service) – phone 1300 094 737 – based in Brookvale.



60 MILLION ICEFISH NESTS FOUND IN ANTARCTICA

Precis of an article by Lauren Fuge, Cosmos, 14 January 2022

The cold, iceberg-filled waters of the Weddell Sea are home to Krill, Emperor Penguins – and a massive breeding colony of Icefish.

A team of German researchers headed by deep-sea biologist Autun Purser, have just discovered 60 million active fish nests across 240 square kilometres of the Weddell Sea. This is the largest fish breeding colony yet discovered, and appears to be a globally unique ecosystem.

Known as Jonah's icefish (*Neopagetopsis ionah*), these fish are found exclusively in the Southern Ocean and live between 20 and 900 metres below the surface, preying on other fish and krill.



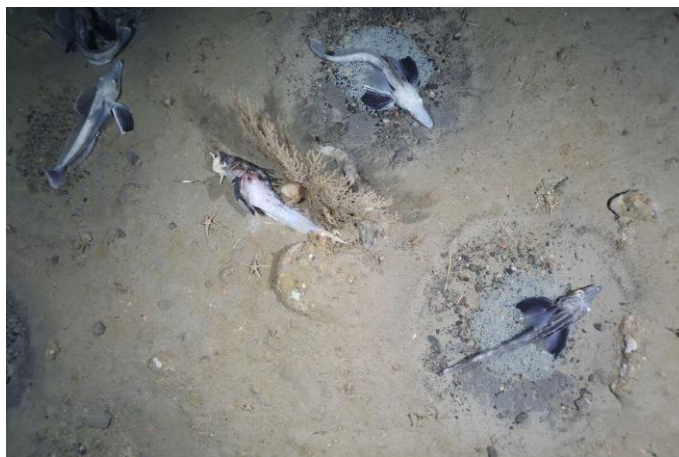
The vast breeding colony was discovered during a survey of the Filchner ice shelf in the German research vessel, Polarstern. They were towing a camera “sled” called the Ocean Floor Observation and Bathymetry System designed to survey the seafloor of extreme environments.

The team knew that this area of the seafloor has an upwelling of warm water so they thought they might see something interesting, but they certainly weren't prepared to see thousands of fish nests. That came as a total surprise.

They directly observed more than 16,000 nests, each about 75 centimetres in diameter and 15 centimetres deep. Most of the nests they found were guarded by a single adult fish, protecting (on average) more than 1700 eggs. The consistent density allowed the team to estimate that approximately 60 million nests span across 240 square kilometres.

Many degraded fish carcasses within and near the nesting colony suggest that, in death as well as life, these fish support local food webs and influence biogeochemical processes.

Weddell seals spend much of their time in close proximity to the fish nests, and they may also take advantage of this colony. The German research team plan to return in April 2022 to survey other areas of the Weddell Sea.



In the meantime, they say that this colony highlights the need for the area to be protected.

They concluded: “We believe our discovery provides support for endeavours to protect the Weddell Sea from anthropogenic impacts by establishing a regional marine protected area.”

THREATS TO NATURE FROM MOUNTAIN BIKING

Last October, the Nature Conservation Council held a networking meeting to share information and plan a unified response to the increasing threat to our national parks and bushland as a result of damage from mountain bike riding, particularly in urban bushland areas of the Illawarra, Northern Sydney, Central Coast and Newcastle.

Mountain bike riding and track creation in the wrong place can cause erosion, habitat loss and fragmentation, and reduced amenity for non-riders in our precious public spaces. Problems arise from formal tracks which are not located or constructed properly, and the proliferation of illegal informal tracks. While the impacts of mountain bike riding have been an issue for many decades, the pandemic has resulted in increased outdoor recreation and pressure on national parks and bushland. There are also a number of proposals across the state for expansion or establishment of formal tracks and facilities for mountain biking, often under the guise of 'ecotourism'.

Several groups and supporters in the NCC network face common challenges with these issues in their local area. Indeed, members of our Society have been concerned, and readers of Wallumetta will recall that we have already reported on bike riding and formation of illegal informal tracks in the Field of Mars Reserve and other local bushland areas.

In the NCC meeting, main issues raised were:

- Environmental impact, with the proliferation of new and multi-stranded tracks in bushland
- Dangers to bushwalkers resulting from cyclists riding at speed
- Damage to existing walking tracks

The National Parks Association (NPA) and National Parks and Wildlife Service of NSW (NPWS) agree that we cannot ignore the environmental damage. Where illegal tracks appear, especially with the creation of features like berms, there is a need to get in early and remove them... as is the case with graffiti.

There is also a need for authorities to take official action. At the moment, Planning NSW has a policy of recognizing bike riding as a legitimate activity, and it is even being ratified in Plans of Management for bushland areas. We have not yet seen any enforcement of laws which would prevent construction of informal tracks.

In summary, the main concerns raised by the NPA are:

- In the National Parks estate, natural values should be the priority
- State funds are provided for recreational infrastructures, but who are the users?
- NPWS, already on limited funds, should not need to provide for all users of National Parks
- Local councils are not evenly enforcing rules; sometimes illegal tracks are formalised
- There is "policy slippage" in regards to Endangered Ecological Communities
- "State Significant Development" funds are available for "Eco-tourism", which raises the question: "Is mountain bike riding really Eco-tourism?"
- Lots of grant funds are allocated to provide for bikes in places like Kosciuszko National Park
- We do not know whether cyclists are members of bike associations with insurance, or whether any WorkSafe plans exist.

The meeting concluded that we want a working group to promote natural values, to contrast with pressure from bike groups. Aims will be to achieve:

- Enforcement of bike controls with strong parameters, and not under-resourced
- Publicity on the natural values BEFORE bike groups attempt to infiltrate
- Adequate resources to control bike activities; this includes signage
- Complete exclusion of bikes from certain categories of land.

NEWS FROM AROUND THE FIELD OF MARS

Bicycle Action (see report above)

Many members have expressed concern about bikes to City of Ryde Council staff and Councillors, and late last year our committee sent a letter to the General Manager outlining the issues with reference not only to the Field of Mars Reserve, but all natural bushland areas in the City of Ryde. The concerns are:

- Widening tracks, with damage to adjacent bushland and including plants classified as critically endangered
- Detours created around natural obstacles on tracks
- Erosion resulting in exposed tree roots and loosened rocks
- Danger to walkers on narrow tracks and boardwalks
- Damage by cyclists deliberately creating tracks, sometimes including mounds for BMX-type jumps
- Cyclists claiming there are no signs prohibiting bikes.

We suggested various actions including ranger patrols and signage so the Council's Natural Areas staff arranged for Corflute signs to be installed at entrance points just before Christmas.

Photograph is of the sign at the main Pittwater Road gate:



What can we do about unauthorised bike activity?

- Report it immediately to Ryde or Hunters Hill Council (the phone numbers are 9952-8222 and 9879-9400 respectively);
- Talk in a friendly way to the offender(s), warning them that they could be fined by a ranger, and explaining why bikes are not allowed in certain areas;
- If cyclists are wilfully damaging a public reserve or endangering walkers, report to police;
- If you see a home-made mountain bike course in a reserve, photograph it if possible and report it to council;
- Report any removal of the "No Bicycles" signage. If signs have been left on the ground, replace them if possible;
- Photograph the offenders and/or damage.

Dob in dogs too!

You can also do something about dogs harming wildlife in reserves where they are banned or allowed conditionally. First, note whether dogs are allowed on leash in the reserves where you walk, or whether they totally banned. If you see an owner transgressing, you can:



- talk to them politely, mentioning the harm dogs do, and warning them of a possible fine;
- Point out that they have walked past dog restriction signs;
- phone Council – (02) 9952 8222;
- if the dog is threatening walkers, phone the police – 131444.

Wildlife

This summer's humid conditions encouraged an abundance of wildlife of various types. To the delight of many visitors, a family of two more ducklings has been grazing near the Visitor Centre and the young ones are now almost adults. In the creek, several dusky moorhen chicks have appeared. And there have been more sightings of the swamp wallabies.

This photo, taken on 23 January, is of a new family of wood ducks enjoying a puddle near the main entrance road. There are six ducklings in this family.



Some ironbark trees have had their bark scraped in odd places - high and out of reach of neighbouring branches – so we are hoping this might be an indication of sugar gliders.

There is also evidence of bandicoots and echidnas, and invertebrate life has also flourished... including (unfortunately) ticks. We recommend walkers consider using repellent. An interesting benefit of Covid precautions is that applying hand sanitizer seems effective in removing ticks.



Photo by Pamela Ward

Bushcare

After operations were suspended last year due to Covid, most groups resumed work in December. Following the festive season break, all volunteer groups are now back again at Field of Mars Reserve sites and are following health guidelines. High winds, wet weather and storms associated with this year's La Niña climate event brought down some trees. This photo shows bushcarers on the Fire Trail at Cemetery Creek 2 after clearing a fallen *Acacia parramattensis*.

Visitor Centre – Still Open!

We maintain adherence to our Covid Safe Plan and a QR Code check-in is still available for anyone entering the building. Most visitors remain outside on the veranda where our volunteers provide lots of information, maps and brochures; however, we do allow those who are really interested to check in and enter the building for a closer look at what we have on display and on offer.

INVITATION: JOIN OUR VISITOR CENTRE TEAM! We have a small number of members on a roster of 4-hour shifts to open the Visitor Centre 9am-5pm on weekends and public holidays. No specialised skills are required, but we need to be double-vaccinated. Alfred happily provides the small amount of training needed. Frequency and times of each person's shifts are negotiated individually according to your preferences and availability. We enjoy providing this service which serves an educative role and enhances community appreciation of the Field of Mars Reserve.

COMING EVENTS:



World Wetlands Day is celebrated around the world on Wednesday 2 February 2022. Birdlife Australia is lobbying for the protection of some important wetlands. Many birds, especially migratory species, rely on our wetlands.

This call for action is an appeal to invest financial, human and political capital to save and to restore the world's wetlands. See <https://www.worldwetlandsday.org/>

Afternoon With the Birds – Saturday 5 February & Sunday 6 February 2022

Our resident bird expert Cathy Goswell will lead these walks, each starting from the Visitor Centre at 4.30pm. An easy route is planned to facilitate social distancing while keeping everyone within hearing range. Numbers are limited; first come, first served.



To register, please email Alfred (alfred.vincent@bigpond.com) or leave a message on 9879 6067. Give your contact phone number and state the number of persons registering and your preferred time. Do not turn up for a bird walk without registering; there probably won't be any spare places. And, if after registering you find you won't be coming, please let us know so your place may be allocated to another on the waiting list.

Saltmarsh Workshop – Saturday 12 February 2022

In conjunction with the Environmental Education Centre (EEC), City of Ryde Council is planning a one-hour workshop to be held in the EEC commencing 10am. Contact City of Ryde Council.

Clean Up Australia Day – Sunday 6 March 2022, 11am-1pm



If you are interested in taking part in the Field of Mars site (for members only) – please contact our site coordinator Alfred on 02 9879 6067. Other sites may be found by checking the website <https://www.cleanupaustraliaday.org.au/>

Saturday, 19 March 2022:

12pm - A River Divided: Brain Power and the Environment

by the celebrated neuroscientist **Professor George Paxinos**

Members and friends of the Society are invited to a public talk at the Field of Mars Environmental Education Centre:

Is our brain the right size for survival at this critical moment in our planet's history? This is one of the issues addressed in Professor Paxinos' recent novel, *A River Divided*, which took the author a record 21 years to complete. After a brief discussion of some historical aspects of neuroscience and his own work on brain atlases, Professor Paxinos will present and discuss his first venture into the world of the novel. Signed copies of *A River Divided* will be available. Further info: <https://www.georgepaxinos.com.au/>

George Paxinos AO is Scientia Professor of Medical Sciences at Neuroscience Research Australia and The University of New South Wales. Among his many distinguished publications, his *Atlas of the Human Brain* has received awards from the Association of American Publishers and the British Medical Association.

Covid protocols will be strictly observed. Everyone attending must be fully vaccinated, wear a mask in the building, and register with QR or paper on entry.

Also on the same day (Saturday 19 March 2022):

1pm - Lunch at the Visitor Centre - Like Professor Paxinos' talk, this is free, though donations to help the Society cover costs will be appreciated. Everyone is welcome, both members and non-members of the Society.

2pm - Annual General Meeting (AGM)

Annual reports will be presented, and elections will be held for our Management Committee for the coming year. All welcome, but only financial members have voting rights. We encourage Society members to consider joining our management team.

Upon conclusion of the formal meeting afternoon tea will be served, and the raffle prize-winning ticket drawn (see below).

NEW MEMBERS WELCOME!

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 rhffps@gmail.com

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.

NAME:

Address:

Phone:

Annual Membership (add \$10 for newsletter to be sent via Australia Post):

\$

Individual \$ 15 (+ \$ 10)

Family \$ 35 (+ \$ 10)

Concession \$ 10 (+ \$ 10)

(Students/Pensioners) Donation

Total Payment:

Email address - please print clearly:

Win this bright Yarnknit rug!

Tickets \$2 each, or 3 for \$5

Tickets available at the Field of Mars Visitor Centre... or you may transfer funds to our Commonwealth Bank account:

RHHFF PS INC
GENERAL ACCOUNT
062171 - 0090 1574.

Put "Raffle" + your name in the comment and email rhffps@gmail.com

with your name and phone contact so your tickets may be reserved.

The winning ticket will be drawn at our next Annual General Meeting.

