



Wallumetta

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

OCTOBER 2019 - No. 277

PRESIDENT'S NOTE

This edition of Wallumetta reports on the Bylong Valley decision by the Independent Planning Commission (IPC) which rejected an application for a large coal mine in the valley.

This is the first IPC decision in relation to a greenfield coal mine since the landmark Rocky Hill judgement in February this year.

In the Rocky Hill case the Land and Environment Court refused approval of a new coal mine to be built just outside of the small town of Gloucester. This is the first time an Australian court has refused consent for a coal mine on the basis of its climate change impacts.

The Court accepted scientific evidence concerning carbon emissions associated with the proposed mine and the concept of a global carbon budget.

The Court stated, *"In short, an open cut coal mine in this part of the Gloucester valley would be in the wrong place at the wrong time.*

"Wrong place because an open cut coal mine in this scenic and cultural landscape, proximate to many people's homes and farms, will cause significant planning, amenity, visual and social impacts.

"Wrong time because the greenhouse gas emissions (GHGs) of the coal mine and its product will increase global total concentrations of GHGs at a time when what is now urgently needed, in order to meet generally agreed climate targets, is a rapid and deep decrease in GHG emissions. These dire consequences should be avoided. The project should be refused."

This landmark case is a turning point in climate litigation in Australia and it is thanks to the work of the Environmental Defender's Office (EDO.) These public interest environmental lawyers are at the forefront of using the law to protect our climate and nature for current and future generations.

Our Society supports the work of the EDO with a modest annual donation and suggests that members also consider supporting the EDO in the same way.

The EDO may be contacted via <https://www.edo.nsw.org.au>

Frank Breen
President

STREAMWATCH HAS BEEN RESCUED!

From July the management of the Streamwatch program was taken over by the Greater Sydney Landcare Network. This is very welcome news. There had been a risk that this valuable program would be discontinued because the NSW government's annual funding of \$100,000 was uncertain. Streamwatch, with almost 300



volunteers, plus 30 years of data, has to have a paid coordinator. It's an impressively cost-effective program established in 1990 by Sydney Water and was managed by the Australian Museum until recently under its citizen science programs. It's a great project that has given schoolchildren, community groups and individuals a meaningful way of getting into the environment.

Data will be migrated to the SEED platform – an open government repository of environmental information hosted by the environmental cluster within the Department of Planning, Industry and Environment. The Landcare Network is delaying taking on new volunteers until the new testing system is finalised.

Streamwatch volunteers monitor our waterways and deliver scientifically accurate data on water quality and biology, mentor students, alert authorities on pollution events, collect litter, provide biosecurity surveillance and provide a historical record of how waterway health has tracked over time. The program engenders understanding and stewardship of our bioregion's ecosystems. This represents a big outcome for a small price!

Streamwatch has repeatedly been the first alert organisation for pollution events. Skilled members of the public perform a brilliant service to the community. Last year 796 data sets were uploaded to the Streamwatch database making almost 5000 data points. How good is that?!



CHOOSE TO REUSE AND GET ON THE GARAGE SALE TRAIL

400,000 Australians put second-hand first as part of Australia's biggest weekend of garage sales on the third weekend of October – this year it is Saturday-Sunday 19-20 October, but because the

City of Ryde Council hold their annual Granny Smith Festival on that weekend, they support the Car Boot Sale held by East Ryde Scout Group on the Sunday after - 27 October this year - at the corner of Twin and Badajoz Roads, East Ryde. You can host your own garage sale or shop the trail!

BYLONG VALLEY SAVED

During September the NSW Independent Planning Commission released its decision to refuse permission for the mine, citing unacceptable impacts on groundwater, heritage and some of Australia's best agricultural soils.



The Commission made it clear that the mining development would have been contrary to the principle of intergenerational equity and that it would contribute

to climate change. This is a great outcome for local farmers who worked tirelessly to protect this incredible place from mining.

The Nature Conservation Council (NCC) believes it is the largest thermal coal mine that has been refused in Australia to date. If it had been approved, it would have operated for 25 years, until at least 2045, and damage to the valley would have been permanent.

NCC acknowledges the work of Lock The Gate and other NCC member groups who fought long and hard for this historic decision. ARE COAL MINES THE REASON SYDNEY NOW HAS WATER RESTRICTIONS?

According to a recent article by Peter Hannam published by The Sydney Morning Herald, coal mining under Sydney's drinking water catchment is drying up sensitive swamps and creeks, and draining groundwater, with more damage likely if a planned expansion allowing mining until 2048 within the Metropolitan Special Area wins approval.*

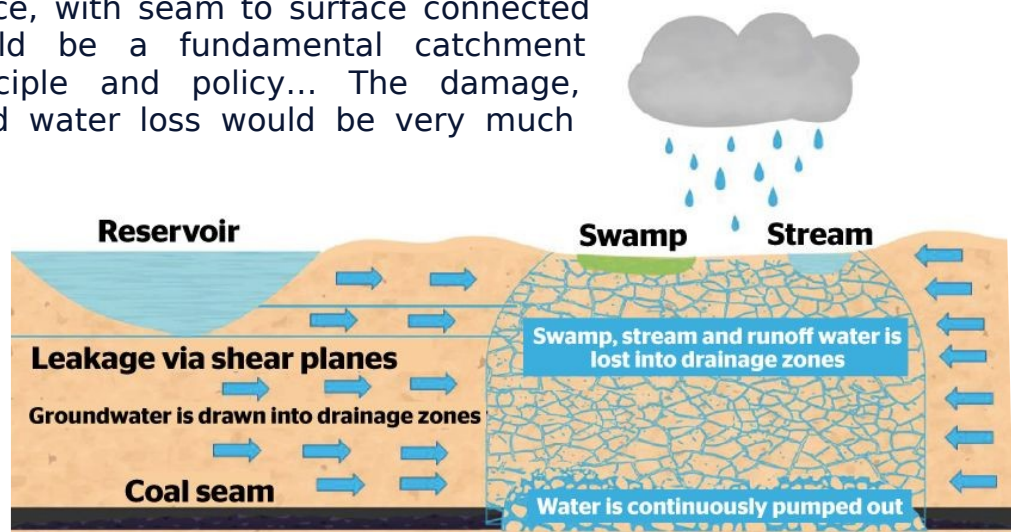
South32's Dendrobium Coking Coal Mine beneath the Cordeaux and Avon Dam catchments is seeking approval to extend operations within its mining lease; however, documents obtained under Freedom Of Information show WaterNSW has raised concerns.

A visit to the area with WaterNSW guides found a swamp near one of the mine's longwalls had all but dried out, with grasses and shrubs dying off on the formerly wet region. Swamps serve as a giant sponge, absorbing rain during falls and releasing water during dry times. When these endangered ecological communities dry out there can be greater erosion and increased fire risk.

WaterNSW believes deep cracks in dry stream beds in the area were worsened by subsidence resulting from coal extraction by longwall mining about 400 metres below.

Dr Peter Turner, mining projects science officer with the National Parks Association, said "Not allowing mining that could cause the drainage zone to reach the surface, with seam to surface connected fractures, should be a fundamental catchment protection principle and policy... The damage, degradation and water loss would be very much less than is so disturbingly obvious now."

Other dams in the Upper Nepean Catchment Area are Cataract and Nepean; both have



Wollongong Coal's longwall mining operations under their catchments. All four dams feed water into Warragamba for distribution throughout Sydney.

* See the full article at

SOURCE: Dr Peter Turner

<https://www.smh.com.au/environment/sustainability/where-s-the-squelch-coal-mine-drying-out-greater-sydney-catchment-20190917-p52s4v.html>

WILDLIFE PROTECTION AREAS

City of Ryde Council has now endorsed the proposed Wildlife Protection Areas for:

- **Field of Mars Reserve** - Category 1 Wildlife Protection Area
- **Kittys Creek Corridor** - Category 2 Wildlife Protection Area
- **Terrys Creek Corridor** - Category 2 Wildlife Protection Area

We are told that dogs and bikes entering the Field of Mars Reserve are now being monitored, new signs have been ordered, and rangers will take action against offenders. **WHAT'S IN A (SCIENTIFIC) NAME - 4. PROTEUS' PROGENY**

The huge, highly varied **Protaceae family** is named after the genus *Protea*, native to South Africa. This name alludes to Proteus, an ancient Greek sea-god, who could change his shape instantly, like water. *Protaceae* are mostly found in the southern hemisphere, in lands once part of the ancient supercontinent Gondwana. There are many genera in Australia, as well as southern Africa and South America.

They are so protean that it is difficult to isolate overall distinguishing features. Many have large, showy flower-heads (inflorescences) with small flowers packed together, as in the genera *Banksia*, *Hakea* and *Telopea* (waratah). The macadamia tree is a member of this family.

The genus *Banksia* is conspicuous with its bright cylindrical flower-heads and its seed-pods made famous by May Gibbs. It is named after the botanist Sir Joseph Banks, who took part in Captain Cook's first voyage (1768-1771) and was a vocal proponent of the colonisation of New South Wales as a penal settlement.

Several *Banksia* species are common in the Field of Mars and nearby areas.

- ***Banksia serrata***, Saw-toothed or Old Man Banksia, was chosen as the logo for our Society. The Latin name refers to its leaves, generally "saw-toothed"; *serratus* (-a, -um), = "serrated", from *serra*, "saw". (Latin adjectives change according to the grammatical gender of the accompanying word. Most genus names are grammatically feminine, hence the ending is usually -a.) It is called *wiriyagan* in Cadigal (see plantnet.rbgsyd.nsw.gov.au) — why don't we make more use of indigenous names?
- ***B. spinulosa***, "Hairpin Banksia", gets its name from its spiny appearance (*spinula* = "little spine").
- ***B. ericifolia***, the Heath-leaved or Lantern Banksia, has many small leaves on either side of the stem. *Erice*, a Latin name derived from Greek, refers to the European heath or heather.



- ***B. oblongifolia***, Fern-leaved Banksia, has elongated leaves, as its name suggests, with less distinct serrations than *serrata*.

Grevillea species, named after the botanist Charles Francis Greville, are familiar as garden plants, in a range of cultivated varieties. Wild species include several with long, “spidery” flower-parts.

- ***Grevillea buxifolia***, Grey Spider Flower, takes its Latin name from the small leaves of *Buxus*, the European box tree, often used in hedges.
- ***G. mucronulata***, White Spider Flower, has a Latin name derived from *mucronatus* (-a, -um), itself a derivative of *mucro*, “point”. The -ul- element is a diminutive; hence leaves “with a little point”.
- ***G. sericea***, Pink Spider Flower: *sericea* = “silky”. Latin *Sericum*, “silk”, “silken garment”, derives from Latin and Greek *Seres*, generally thought to refer to the people of northern China, who produced and exported this textile.



[There will be more of Proteus’ Progeny in the next Wallumetta.]

NEWS FROM THE FIELD OF MARS

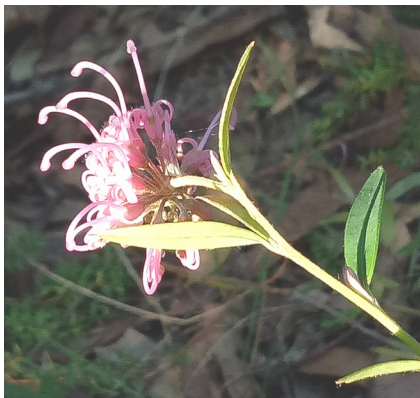
City of Ryde Council installed a new sign at the Pittwater Rd entrance:

Cemetery Encroachment Restoration Works

The plantings above Cemetery Creek 0 survived adverse weather conditions over recent months. In an interesting twist, Northern Cemeteries (the company responsible for management of the Field of Mars Cemetery) complained to City of Ryde Council about encroachment of lantana from the Field of Mars Reserve onto their land! No acknowledgement, of course, of the hours of work by our bushcare volunteers controlling weeds and plastic flowers invading the Field of Mars Reserve especially around Cemetery Creek 2.

Bridgeworks

Over the past two months, contractors engaged by City of Ryde Council have been constructing a shared bicycle/pedestrian bridge over Buffalo Creek at Pittwater Road. This bridge is cantilevered from the existing road bridge so as to minimize impact on natural saltmarsh vegetation. Until the bridgeworks are complete, pedestrians are being redirected through the reserve to cross the creek at the bridge near the Visitor Centre. An unexpected consequence is that bicycles are coming this way, too.



Middle Grass Project

There is promising regrowth of native plants following the removal of weeds

encroaching on natural bushland above the middle grass area near the Warada Track:



(Photos by courtesy of Cathy Merchant)

Why is the Sand Track sometimes waterlogged near Cemetery Creek 2?

This year, some works were done within the cemetery grounds above Cemetery Creek 2 and in the Upper Greek Section which is 100 metres to the west. During these works, the Sand Track often became boggy near the Cemetery Creek 2 crossing and we thought the water would disappear after the work finished... but water continues to come down across the track just to the west of the creek crossing. During recent bushcare work, we noticed water in the bushland below the Upper Greek Section, and less water between there and Cemetery Creek 3. We now believe drainage arrangements in the cemetery have changed, and we will continue to monitor impacts on the natural bushland.

National Tree Day Follow-up

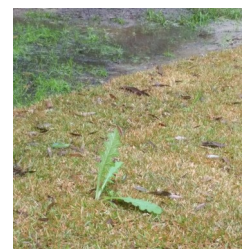
The new plants are still alive, and have survived activities of the resident brush turkey who is more interested in old leaf litter rather than the new chip mulch used in the planting area. He is scratching over and around the new mulch with no evident damage to the new plants.

At Ryde East School this year, students planted 170 shrubs and ground covers as part of their ongoing project to improve the small bird habitat and wildlife corridor between the Field of Mars and Wallumatta Nature Reserve. School plants were supplied by The Habitat community native plant nursery, and paid for by City of Ryde Council and a grant organized through Birdlife Australia.

Visitor Centre



During dry weather after it was planted the Zoysia turf became brown, but recent rains have promoted some promising green growth. We are controlling a few weeds that have sprung up through the turf from the ground below!





Many birds have been seen at the Centre, and wood ducks have started families, with four ducklings sighted recently.

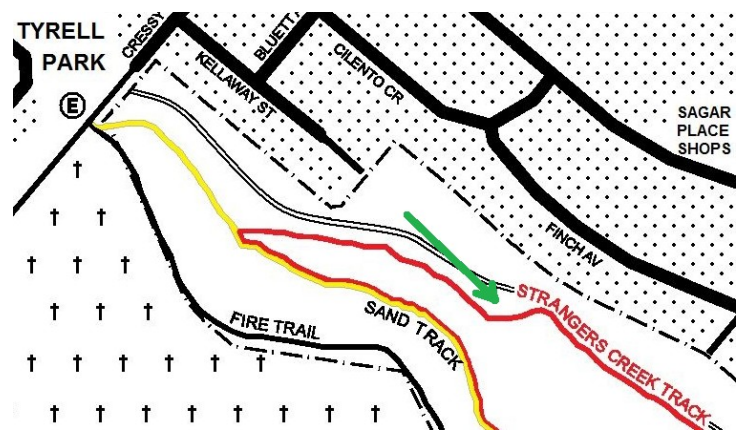
During weekends in August-September our volunteers sighted an average of 75 visitors per day visiting the reserve, with an average of 20 actually visiting the Centre. These statistics do not include our Family Festival or those who came to the Powerful Owl presentation.

Members are always welcome to join our team of volunteers to keep the Visitor Centre open on weekends. We do four-hour shifts. No specialised skills are required, and

Alfred will happily provide the small amount of training needed. Frequency and times of each person's shifts are negotiated individually, according to preferences and availability. If you are interested please phone Alfred on 02 9879 6067.

Bushcare

The Finch Avenue Bushcare Group meets on the third Sunday morning of each month, and until now has focused efforts on the north side of the creek near the clearing at the back of Kellaway St. The group is now being renamed "Strangers Creek Bushcare" and its attention is redirected to the natural bushland on the south side of Strangers Creek, to control weed encroachment there. During September, in the area indicated by the green arrow on this map, we found and attended to weeds including Asparagus Fern, Ochna, Privet, Honeysuckle, Indian Hawthorn and Lantana. In some places we have deliberately left Lantana as it can protect nearby plants and provide habitat for small birds. The Kennedy Street Bushcare Group meets on the fourth Saturday of each month, and is working along the rock face near the access road to the Visitor Centre. Following the recent road and drainage works, volunteers from Tzu Chi planted some groundcovers and grasses in the crushed sandstone alongside a short section of the access road.



On Tuesday 10 September, the Monash Road Group had an exciting diversion! While we were working in the vicinity of the entrance track and Buffalo Creek, a police helicopter came hovering low overhead, looking for a missing person. Downdraught from the rotor brought gum tree branches crashing down around us (see photo) so we beat a hasty retreat to the safety of nearby Privet bushes.

(Never before did Privet look so welcome!) With the helicopter continuing to circle around, we all stopped work and adjourned early for our morning tea.

EVENTS AT THE FIELD OF MARS

Family Festival Day on Sunday 11 August was well attended even though local newspapers made no mention of it prior to the event. The Ryde East School Choir regaled us with a harmonic a cappella rendition of an Aboriginal song, followed by the popular song, Octopus's Garden. Following this, Cathy Goswell led one of her popular bird walks and others browsed a River Keeper and Sustainability display provided by City of Ryde Council, and plants brought in by The Habitat community



native plant nursery. Local birds were not shy, as can be seen in the photo of a kookaburra which landed on the sound system box right beside John!

For many who came on the day, this was a first opportunity to look around inside the Visitor Centre and the Field of Mars Environmental Education Centre, where Karen Moses held her workshop for younger children. The event ended with a short bushwalk to admire the spring flowers including *Boronia pinnata* near the Sand Track seat junction.

Powerful Owl Talk was presented by Dr Beth Mott on Saturday 31 August at the Environmental Education Centre. This event was organised by City of Ryde Council and very well attended, even though the weather was not very kind. A highlight was the walk to see powerful owls nesting in the Field of Mars Reserve. These owls normally make their nest in the top of a dead tree trunk and the tree in which they had their former nest was removed recently, but they have now nested in the top of another dead tree. To learn more about these magnificent birds, a booklet is available from the Visitor Centre for a small donation, written in association with Birdlife Australia by several northern Sydney environment groups including the RHHFPS.

Joey Scouts Visit On Friday 27 September, 21 Joey Scouts (aged 5-7 years old) from North Ryde and East Ryde came with their leaders and parents to visit the Centre for another evening bushwalk and barbecue. This time it did not rain! These young girls and boys did a short walk around the Doyle-Warada Loop and heard various birds including wrens, wattle birds and kookaburras. It was also possible to hear the striped marsh frogs along the creek. After the



walk, they were joined by their parents for a barbecue+salad dinner at the Visitor Centre. As so often happens, many adults present were visiting for the first time and now wish to come again in their own time to see the reserve on a weekend.

Rainwater Harvesting Workshop was also organised by City of Ryde Council at the Environmental Education Centre, on



Saturday 28 September. Presenter was John Caley, who shared a wealth of knowledge for setting up and maintaining a rainwater tank, including:

- how to choose the best tank size
- calculating roof area and demand rainwater
- the different types of tanks and installation requirements
- inclusion of first leaf screening mesh, rain heads and first flush diverters
- how to ensure suitable water quality and minimise health impacts

An impressive part of the presentation was a working model of a rainwater tank system, provided on loan from the Inner West Council.

COMING EVENTS

- Sunday 6 October – **Bird Walks by Cathy Goswell** of the Cumberland Bird Observers Club. Departure times: 8.30am and 10.30am from the Visitor Centre in the Reserve. October is Bird Month and this is a great way to begin! Children aged 5-12 are welcome but must be accompanied by an adult. Booking is essential as numbers are limited: please phone or leave a message for Alfred on 9879 6067 or email alfred.vincent@bigpond.com, mentioning your preferred departure time.
- Monday 14 October – **2040** at Macquarie Event Cinema, 7pm. The Ryde Gladesville Climate Change Action Group has organised a showing of this inspiring film which shows how we can deal with climate change now using the technology we currently have. To ensure this film goes ahead, please make a **booking by 4 October** if possible. For tickets and further information, go to <https://fan-force.com/screenings/2040-event-cinemas-macquarie/>
- Thursday 7 November – **Be Fantastic. Cut Single-Use Plastic! Sustainable Solutions Expo** at **Ryde Civic Hall**, 5pm-8pm. There will be free toolkits, new tips and skills, and opportunities to meet suppliers, innovators and change-makers and share stories of your plastic-free journey with others in the community. This is a free event organized by City of Ryde Council; bookings are essential – see <https://www.ryde.nsw.gov.au/Events/Listing/Be-Fantastic.-Cut-Single-Use-Plastic-Sustainable-Solutions-Expo>
- Saturday 7 December 12pm – **End-of-year Get-Together for Society members:** Join us from midday at the Visitor Centre, when we will light the gas for a barbecue + salad lunch and chat.