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# AABR Events in NSW Register now

LOOKING AFTER LANE COVE NATIONAL PARK FOR THE LONG-TERM



Saturday 2-4pm

16th July 2022

The role of community in successful regeneration projects.

projects.

Friends of Lane Cove NP GUIDE: TONY BUTTERISS

# Site Visit Lane Cove National Park,

# Chatswood, Sydney

Saturday 16th July 2022 Looking after Lane Cove NP for the long term

Find out more and register

https://www.aabr.org. au/event/looking-afterlane-cove-national-parkfor-the-long-term-withcommunity/



# Eastern Suburbs Banksia Scrub -Fire management

NORTH HEAD SANCTUARY MANLY (NSW).

SUNDAY AUGUST 21 10AM-1PM



#### Site Visit North Head Sanctuary, Manly, Sydney

Sunday 21st August 2022 Eastern Suburbs Banksia Scrub - Fire Management

Find out more and register https://www.aabr.org.au/

https://www.aabr.org.au/ event/eastern-suburbsbanksia-scrub-firemanagement-date/

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#### Site Visit Scheyville National Park, Western Sydney

Saturday 3rd Sept 2022 Using fire to restore Cumberland Plain Woodland

Find out more and register

https://www.aabr.org. au/event/using-fire-torestore-cumberland-plainwoodland/

# **President's Perspective**

Another Federal Election is done and dusted. Though it was heartening to see Climate Change featuring so prominently in the policy platforms of many of the parties, as well as in in media coverage, it was disappointing that very little was said by any party in relation to their policies regarding biodiversity; the need to address the extinction crisis and to invest significant resources into high quality restoration of degraded ecosystems.

The pace, type and resourcing of ecological restoration has changed significantly over the last few years. Many local councils which were at the leading edge of practice have wound back their bush regeneration programs, impacted by more demand on their rate funds, COVID and having to invest in natural disaster recovery.

Many State and Territory Agencies have slowed their progress towards better bushland management and often now neglect their invasive species management programs, or have reverted to 'Pull and Plant' projects rather than undertaking assisted/facilitated natural regeneration in their degraded bushland estate.

Grants programs, the historical driver of many bush regeneration projects are now often losing a strategic and visionary focus and we have seen numerous grant programs over the last few years concentrating on low quality tree planting, funded through short term programs. There are also a series of new drivers of biodiversity management in Australia. Market based programs, seeking either biodiversity or carbon sequestration outcomes are channeling hundreds of millions of dollars into the management of bushland, but not always with sufficient standards for the implementation of works, biodiversity outcomes or audit and review. Some participants in these programs do not always have good land management and biodiversity conservation as their primary focus.

Within its resources, AABR will continue to engage in these areas, advocating for evidence based and science driven design of programs, encouraging and communicating best practice restoration practices to program owners and through expansion of our Accreditation program, collaborating with other NGOs on areas of mutual interest and providing avenues for our members to engage with us on this journey to ensure that all effort to restore bushland is a good effort.

In this issue, there is information about what AABR is doing to improve and expand our Accreditation program, and we will have articles in upcoming issues on our ongoing partnerships through the Restoration Decade Alliance, where AABR is leading the Best Practice Working Group. As always, we welcome feedback from members and encourage members to get involved in AABR working groups to help improve outcomes for the bush.

## Peter Dixon, President

# Want to catch up with what is happening as part of the UN Decade on Ecosystem Restoration?

Don't miss the UN Decade April Highlights – the Newsletter is out now and can be viewed from here.

The newsletter also has the link where you can subscribe.

This edition focuses on updates and engagement opportunities from the Society for Ecological Restoration, Accion Andina and Fairventures Worldwide.

# We support the



"AABR acknowledges Australian Aboriginal and Torres Strait Islander peoples as the First Nations of this continent and recognises their custodianship and continuing connection to its land, waters and community.

We pay our respects to the Elders past and present and future, for they hold the memories, traditions, culture and hopes of Indigenous peoples across the nation."

# Welcome to new AABR Members

Andrew Brophy Aryaa Vidyarthi **Blake Dangerfield Carolyn Frewer** Cesar Medina Davila Dee Muir Di Devai **Emily Thompson Emily Lukavic Fiona Willis** Geogie Mansfield Hannah Demerise Heather Duff Jo Shetliffe Joel Karanges John Blatch Joshua Shorrock Julie Barnwell Leanne Bunn Liam McCormack Liz Barraclough

Luke Genner Matthew Allison **Mitchell Booty** Paula Boer Peta Jansma-Smith Peter Geelan-Small **Rachael Riseley Ray Moynihan Ryan Jansen** Samuel Dawson Shannon Richards Shaymus Gooley Stacy Mail Steffi Tanian Tamara Jeffries Tim Klazema Trent Reed Vicki Cullen

**Business** Acacia Environmental



# **AABR Working Group Updates - May 2022**

# Marketing & Communication Working Group – Jane Gye (Chair)

Many ideas are being considered by the Marketing and Communications Working Group to promote AABR, in particular bush regeneration, accreditation and membership. Suzanne, AABR's Exec Officer has already developed a social media strategy which we are now moulding into an overall strategy for the Group. Hopefully real outcomes will be achieved in terms of growing AABR membership and especially numbers of accredited bush regenerators throughout Australia, where it's possible. The importance of bush regeneration/assisted natural regeneration to the broader ecological restoration practices is something that will be promoted to as many stakeholders as possible.

The WG is very keen to contact land mangers about accreditation (eg Council Bushland Managers, Bushcare Officers etc) so if you know any, can you please ask them if you can give their name and email/phone to AABR (email Jane secretary@aabr.org.au)?

# Membership Working Group – Louise Brodie (Chair)

The membership working group (should I say duo) has tabled the current membership categories and fees for consideration. We have now listed the current benefits for each category and are in the process of identifying other possible benefits. Do you have any ideas for possible membership benefits? email Louise at membership@aabr.org.au

# Chemicals In the Management of Biodiversity (CIMB) Working Group – Patrick Deasey (Chair)

The CIMB hosted an interesting webinar on innovations in the chemical control of vertebrate and invertebrate pests. The talk was well attended, and despite going for two hours, kept most people engaged and asking lots of questions.

See Page 6 for a summary. The link to the webinar is HERE

Over the past 6 months we have hosted several informative meetings, targeted at industry wide issues and requests from members. We have agreed to consolidate the learnings and information from these events into resources that AABR members and the industry can draw on. This will be great, as we can make resources available on these two webinars for a start :

**Glyphosate**- Experiences of local Government in restricting its use **Off Label Chemical Use** – National and State perspectives

# Reconstruction Working Group - Rob Scott and Tein McDonald

The group continues to meet to plan a document or series of documents that (a) outline the what, where, when and why' of ecological reconstruction (i.e. broadscale reintroduction of a plant community where all resilience has been depleted) and (b) case studies that illustrate best practice reconstruction planning, modelled on the National Restoration Standards. Watch this space for gradual progress with this proposed project.

# Expressions of Interest open to join AABR on 11th-12th Nov 2022 for a Visit to Ben Ricketts Environmental Preserve, Jamberoo NSW

AABR is planning a visit to Ben Ricketts Environmental Preserve in November. The bushland property is on Jamberoo Mountain between the towns of Jamberoo and Robertson.

It is on the Illawarra escarpment, adjoining Barren Grounds Nature Reserve, around 2 hours south of Sydney. The tall eucalypts and rainforest provide habitat for a diversity of fauna. Bush regeneration has been undertaken on the property for 20 years to remove weed and to allow regeneration in cleared areas.

It is planned that Friday 11 November 2022 will be a day for land managers, council officers etc to find out about work on the property and the background to its conservation. Friday night is planned for a communal dinner and talk, with Saturday 12th being a day for AABR members and others to visit.

There is limited accommodation for rent on the property and nearby.

AABR is seeking expressions of interest as numbers will be limited. Please send your name and contact details and who else would be coming with you to Suzanne admin@aabr.org.au.







Find out more about Ben Ricketts https://www.benricketts.org.au/

# It's membership renewal time

Our membership year is from 1 July to 30 June, so fees will be due after the 30th June. Keep an eye on your inbox for your invoice which will be emailed to you (or by post if you are not on email) and of course except those who are already paid up.

There is the option to establish a Direct Debit, so your ongoing support is seamless, along with multiple year renewals that

provide a discount if a 5 year renewal is undertaken.

Membership and accreditation fees, are each \$35 annually and \$20 unwaged. Businesses, NFP organisations and Agencies will pay according to the list on the last page of this newsletter.

Your membership fees are used to support AABR's activities. Check Newsletter 151 to see what we achieved last year.

# AABR Walk and Talk - Cooper Park Woollahra

# Rudi Adlmayer, Bushcare Liaison Officer Woollahra Municipal Council Gadigal Land

On Tuesday the 5th of April 2022, AABR had a field trip into the Bushcare site at Cooper Park in the eastern suburbs of Sydney in Woollahra and learnt about some of the strategies Woollahra Council has used there for the last 20 years with its Bushcare volunteers and with its council bushland maintenance team since the mid-1970s.

Cooper Park sits on First Australians land, and we acknowledge

the Gadigal and Birrabirragal people as the traditional custodians of the land in this local area. Woollahra Council has numerous cultural sites including Cooper Park and was recently awarded the National Trust Heritage Awards for a recent Aboriginal Study it completed last year.

Cooper Park is a 15ha site with 12 ha of a mixture of remnant and revegetated bushland.

The Plan of Management for the site states that Cooper Park's plant communities would most likely have been Shrubby Open Forest (ridges and upper slopes), Tall Open Forest (sheltered valley slopes and creek embankments) and a Swampland Association (lower flat area at western end of park).

The walk started at the Cooper Park amphitheatre in Bellevue Hill and circled the park walking through the current Bushcare Woollahra site, then across to the bushland maintenance team managed site along the Cadigal walk.

Two Acacia terminalis subsp. Eastern Sydney, a threatened species that occurs naturally on site, were sighted on the walk. These are managed by thermal weeding methods.

The current Bushcare volunteer site is 20 years old and is on a highly degraded land fill site along the southern edge of the park. It has been restored from a lantana infested site with provenance vegetation grown at Woollahra Council's Bushcare Volunteer Nursery. The sites maintained by council's bushland maintenance team have existed since the mid-1970s when council staff started planting trees and shrubs from around Australia, such as *Corymbia citriodora* (lemon scented gum) and *Eucalyptus microcorys* (tallowwood) which are not native to Sydney, and they still stand today.

In the late 1980s Council's Parks and Gardens Managers of the time, Noel Ruting and Julie Whitfield hired a park manager Jeff Hill who still lives in the Cooper Park residence, to start scheduled



Above: Cooper Park

bush regeneration methods on the park using in house bush regenerators and National Trust contractors that worked side by side once a week for about 10 years until a council restructure in the late 1990's.

The bush regenerators used natural regeneration to assist an existing seed bank to grow. Most of the understorey of the Cadigal and Grey Gum walks are a result of the ecological restoration from this time.

> During this time, the weed levels of the park were high, with up to three quarters of the park having > 70% of weed. They included large woody weeds such as *Ligustrum sinense* (large leaf privet), *Olea europaea* subsp. *cuspidate* (African olive) and *Ochna serrulata* (ochna), and the other usual culprits such as *Lantana camara* (lantana), *Hedychium gardnerianum* (yellow ginger lily), *Ehrharta erecta* (veldt grass) and *Tradescantia fluminensis* (trad).

Today the park, with scheduled maintenance, has reduced the areas of weed, with now only about one quarter with weed levels >70%.

 Left: Cooper Park Weed Densities 2021

 • Green <10%</td>
 Blue 10-30 %

 • Orange 30-70 %
 Red > 70%

 Map: Woollahra Council
 Map: Woollahra Council



#### **Work Methods**

Good maintenance, hiring qualified staff, and adapting to continuous improvement around work methods has and is integral to this weed management process.

Some of these work methods over the last 30 years have included solarisation and composting of weeds on site, the introduction of herbicides selective and non-selective, the use of trained Bushcare volunteers, biological control, and the use of fire, with fire being probably the most important. Currently Woollahra Council and numerous councils in Sydney use thermal weeders that put a constant flame, fueled by LPG, on regenerating weeds and around areas that will assist natural regeneration. At Cooper Park we have used it extensively around *Acacia terminalis* subsp. *Eastern Sydney* with varying success.

A game changer, I think, is the use of traditional ecological knowledge around the use of 'fire sticks' which is gaining popularity and scientific backing more and more these days.

There is also the recent development of Bioherbicides, which are fungi and other microorganisms that naturally afflict a species. These are being developed and can be injected to trees via powder in capsules to control some woody weeds without herbicide. This may be the future if backlashes against herbicide continues.

#### **Other Innovations**

For the tech heads amongst us the QR code and the dependence on mobile technology is starting to appear more in bushland all over Australia including Cooper Park which is the location of a 'Go Slow for a Mo' trail, a pop-up nature wellness trail designed to refresh your mood, energy and focus whilst forest bathing. As we all know, bushland is great for mental health.

The Council's bush regeneration staff have also started using the SER Recovery Wheel to evaluate the degree to which their ecosystem under treatment is recovering over time. This is part of their site management reports which gives a more in-depth intrinsic evaluation of how ecosystems work and how healthy or degraded they are. However ongoing weed density is still reported in percentages as part of Council's yearly biodiversity reporting.

In summary the Bush Regeneration programs are still in place today with an in-house Bushland Maintenance team of seven and about 90 volunteers maintaining 10 bushland sites over the Woollahra LGA. This is supplemented with bush regeneration contractors at some sites.



In this UN Decade on Ecosystem Restoration this walk hopefully provided a chance to see what can be accomplished in a decade or two and the structures and support that is required to make a difference in the management of urban bushland.

If you are in the area, drop in and if you need any more information on Bushcare Woollahra check out our Bushcare website.



Hosts for the visit. Left: Rudi Adlmeyer from council.

Right: Danny Hirschfeld with the Acacia terminalis subsp. Eastern Sydney

Photos. V Bear Little Gecko



# CIMB Webinar : Innovations in the Chemical Management of Vertebrate Pests

The April 2022 monthly meeting of the Chemicals in the Management of Biodiversity (CIMB) working group of AABR incorporated two presentations. Richard Francis shared information on vertebrate pest management for strategic biodiversity outcomes and Dr Linton Staples talked about the innovative, new, humane bait for feral pig control HOGGONE.

Below are very brief notes on the webinar topics. For the illustrated full story watch the videos which are available to see on the AABR website https://www.aabr.org.au/portfolio-items/innovations-in-the-chemical-management-of-vertebrate-pests/ with the Q and A session at https://www.aabr.org.au/portfolio-items/innovations-in-the-chemical-management-of-vertebrate-pests-q-a/

This webinar was sponsored by AABR members Naturelinks and ABZECO.

# **Chemical Control of Pest Animals**

## **Richard Francis, ABZECO**

The remnants we work in are modified ecosystems where the vegetation structure is altered and pest animals affect the structure through herbivory. In general, we tend to only control the obvious, traditional pests such as rabbits, foxes, some areas wild dogs, and camels, goats and deer.

All pest animals cause some disturbance, and this is often what we act upon, eg wallowing by pigs. Our management causes disturbance which can assist pest animals.

#### Herbivory

We have numerous introduced herbivores, and of which some, such as mice and pigs, are omnivorous.

- Red-legged earth mites proved an issue on one site, where the mites caused chlorosis.
- Deer selectively browse. They reduce vegetation cover, affect flowering and seed set which leads to alteration of vegetation.
- Snails and slugs are often the overlooked as herbivore pests in the natural environment. Slugs eat algae on the soil surface and affect the development of the soil crusts. Fire can be effective for snail control and can be used for managing particular species. Sluggoff <sup>®</sup> is an effective bait.
- Other herbivores include rabbits, goats
- Rodents mice and rats are major consumers. They are omnivores and eat seeds, plant parts, fruits, invertebrates, juvenile animals, and mice can be seen harvesting corms.
   Mouseoff<sup>®</sup> is a rodenticide which is very effective. It hits the stomach acid and turns into phosphene gas. Mice start to feel ill when they consume it, so they go back to their burrows to expire. Used in agriculture with no reports of off-target effects the only bait permitted for broad acre agricultural use.

#### Predators

Cats and foxes are a major issue across most of Australia.

- **Foxes** will bury food and then dig up food so baits can be used. There is a range of tools for fox control. Cooked liver baits with 1080 injected are a natural bait.
- **Cats** are hard to manage. They are not so keen on digging up baits, so they need food at the soil surface which is not acceptable in natural areas and this puts other animals at risk.
- Other pests include pigs, wild dogs, and cane toads, and even brushtail possums can get to huge numbers in some locations and kill trees and prey on bandicoots.

#### Innovations

Felixer - the grooming trap for cats. This is a smart trap and is a major bonus. It shoots gel containing 1080. The trap has sensors which determine the right size of the animal before shooting the gel onto the fur. Cats will lick the 1080 gel off themselves.

**Deer control** has only been effective with aerial shooting or fencing a specific area which is effective, but expensive. The

National Deer Control Strategy recommends developing new tools including chemical control. There is a big push to remove smaller isolated populations, which are generally further west.

A treadle activated bait station for goats has been developed. Free feeding is used first. Macropods have large flat feet which results in the treadle closing their access to bait. But we need a bait that is registered for deer, and a slight, modification for height.

**Richard Francis is an** ecologist and the owner of ABZECO (Applied Botany, Zoology & Ecological Consulting) a consulting business specialising in pest animal and land management based in Melbourne. He is current president of the Vertebrate Pest Managers Association of Australia.

# Hoggone TM - one the newer vertebrate pest controls

#### Dr Linton Staples ACTA (Animal Control Technologies Australia).

The development of **Hoggone TM** has a big American component. The project arose out of association with the then Invasive Animals Cooperative Research Centre (CRC). There has been major collaboration with Texas Parks & Wildlife and it is a high priority project in the USA Department of Agriculture. In Australia there are very few resources for tackling pigs.

Pigs are a major invasive pest species causing environmental degradation, predation of stock and wildlife, and massive crop damage. Diseases can be present in pigs and pose a threat. These include foot and mouth disease and now Japanese Encephalitis found recently in Australia, which is transferred to humans from pigs by mosquitoes.

Pigs have been in the US and Australia for a long time but have become a major problem in the last 40 years. We cannot remove pigs from Australia, so we try to locally reduce populations. The USA tries to eradicate small incursions (usually brought in by hunters). Where pigs are endemic, they are managed as in Australia.

There are as number of ways to remove pigs such as trapping, shooting, fencing. In Australia we use poisons, such as 1080, or warfarin but these have drawbacks, and are not humane.

**Hoggone TM** (micro encapsulated sodium nitrate) has a number of improvements – quick, low residue and no secondary poisoning risks. But there are some challenges.

# Downloads: HOGGONE BOOKLET, QUICK GUIDE and the ACTA NEWSLETTER

**Dr Linton Staples** researched reproductive biology at Cambridge University. On his return to Australia, he saw that foxes posed a greater threat to lamb production and wildlife than was previously recognised. This led to FOXOFF as the first shelf-stable commercial bait to enable systematic predator control. Subsequently he developed products to better control wild dogs (FOXECUTE and DOGABAIT), rabbits (RABBAIT), feral pigs (PIGOUT/HOGGONE), cane toads (TOADINATOR/ ACTA ATTRACTA), invasive ants (ANTOFF/ SYNERGY), plague rats (RATOFF) and mice (MOUSEOFF).



# **42** *Years of The Solar Village Project* a community science experiment initiated by the residents of the Solar Village, Humpty Doo, NT

# Liam Golding, Solar Village resident

This is the story of Solar Village, which is situated approximately 35 km south-east of Darwin near Humpty Doo, and the successful landcare impact of the Solar Village Project.

After Darwin was destroyed by cyclone Tracy in 1974 a number of people wanted the resilience of the region increased by investing in energy conserving technologies such as solar power and tropical architecture design. The Solar Village Project began in 1978 with members choosing to live 'off grid', experimenting with new independent technologies and co-managing 320 acres of bushland in Humpty Doo.

The village was set up with the land being bought as a company with anyone who put money in, getting an entitlement to a block. There are 13 off-grid blocks of bushland. At the time of setting up the village, the site was degraded from annual burning, a previous dense buffalo population, and cyclone Tracy. The pioneering residents set up the property as a citizen science fire exclusion zone, within the highly flammable landscape of the top-end savanna. The last year of the annual fires was in 1979.

Originally the residents had not thought about the effect of fire exclusion on the native vegetation. They had plans to undertake small farming experiments, but after 3 years of exclusion when they noticed all these plant stems springing up everywhere, they shifted to focus on 'farming biodiversity'. Up until the first survey, botanists had thought there may be structural change but not compositional change with the local biodiversity. This resulted in many debates with at least 2 botanists documenting the change.

Many locally rare plant and animal species have returned and now it is a biodiversity hot spot. A number of research surveys have taken place within the experiment – (See references -Fensham, 1990., Woinarski et al, 2004., Flora and Fauna Division, 2018). It continues to serve as an important ongoing experiment with a positive landcare impact and currently hosts a Land for Wildlife project.

The Solar Village community made a commitment to a fire exclusion experiment of an indefinite duration. The residents had good communication, organised meetings and working



bees with great trust in each other. There was a duty crew and a fire watch system operating on a roster. An overhead quickfill facility was built for the fire fighting vehicles and a light truck with a drop on firefighting unit. The Northern Territory fire service altered the requirement for a firebreak around all 13 lots and allowed the village to work with a single collective firebreak of 50 metres wide on the perimeter. The quality of the soil has improved, infiltration of rainfall has increased, and tree species confined to the riparian zone have established themselves almost everywhere. Rainforest birds such as rose crowned fruit doves, emerald doves, night jars, jungle fowl and rainbow pittas reside and disperse seed. Rarer small mammals including possums, bandicoots and black footed tree rats thrive. What was once a sparse grassland has been replaced with tropical closed woodland and dry jungle with gallery riparian rainforest.

The study by Woinarski, Risler and Kean (see reference below) in 2004, looked at the vegetation and vertebrate fauna after 23 years of fire exclusion. Fire is a frequent event in tropical savannas with marked seasonality with a long dry season and a high incidence of lightning. This of course influences the vegetation and fauna. However, there are some fire-sensitive elements in these forests, and for these, fire regimes need to avoid the more extensive and destructive fires that occur.

The study compared part of the 120-ha tropical open forest protected from fire for 23 years, with an adjacent block burnt annually over this period. Whilst fuel loads did not differ significantly there were major differences in the composition of trees and shrubs. Richness of woody species was far higher in the unburnt treatment, while richness of annual and perennial grasses, and perennial herbs was higher in the annually burnt treatment. The unburnt area had a far higher representation of rainforest-associated species The vertebrate species composition varied significantly between treatments, but there was relatively little difference in species richness (other than for a slightly richer reptile fauna in the unburnt treatment). Again, there was a tendency for species that were more common in the unburnt treatment to be rainforest-associated species.

The results from this study suggest that there is a sizeable and distinct set of species that are associated with relatively longunburnt environments, and hence are strongly disadvantaged under fire regimes involving frequent burning. Burning regimes should take this into account.

#### References

J. C. Z. Woinarski, J. Risler and L. Kean (2004) Response of vegetation and vertebrate fauna to 23 years of fire exclusion in a tropical *Eucalyptus* open forest, Northern Territory, Australia. *Austral Ecology*, (2004) **29**, 156–176 https://doi.org/10.1111/j.1442-9993.2004.01333.x

Fensham R. J. (1990) Interactive effects of fire frequency and sitefactors in tropical *Eucalyptus* forest near Darwin, northernAustralia. *Aust. J. Ecol.* **15**, 255–66. https://doi.org/10.1111/j.1442-9993.1990.tb01029.x

Liam Golding currently resides at Solar Village and has worked around the Top End and Asia/Pacific in conservation and community development. He was Jawoyn Association's Land Manager developing the savanna fire and land management project portfolio. He currently works as a Ranger Program Development Officer, Northern Land Council. liamgolding@hotmail.com

His property is host with https://www.workaway.info/en/host/175557661832. This site allows travellers and hosts from all over the world to work on projects and learn, contribute, and give back to the places they visit.

# Learning about Grasses

So far in 2022, AABR has been overwhelmed with interest in the Grass ID for bush regenerators workshops with six being held, three on the Central Coast at Kariong and 3 on the North Coast at Wollongbar, with 157 attendees and 1 amazing trainer, Harry Rose.

There was an abundance of information shared as plant specimens were scrutinised, specialist knowledge imparted, and anecdotes of adventures shared. More workshops are being considered for later in the year at different locations, covering field identification in order to satisfy AABR members and the demand.

Harry Rose has elaborated on some of the items of interest that he covered in the workshops for readers of the AABR Newsletter.

# Name changes and NSW PlantNET

# Harry Rose, Grass Guru

There have been a lot of changes in plant names in recent decades. These changes are not always reflected in NSW PlantNET (NSW Flora online) species pages and associated keys due to a lack of herbarium staff in general, a lack of specialists for many plant families (e.g. the last grass specialist died in 2009) and a lack of funding for the site's upkeep.

The chronic underfunding and staff shortages can also appear to lead to disagreements between the NSW State Herbarium and other state herbaria on what a species' current name should be and whether a species is native or introduced.

Examples of these problems occur with *Oplismenus* (basket grass) and *Digitaria didactyla* (blue couch):

- NSW (and Qld where the last grass specialist died in 2014) lists *Oplismenus aemulus* and *O. imbecillis* as separate species, but all other herbaria have combined them into one variable species *O. hirtellus*.
- NSW PlantNET page lists *Digitaria didactyla* as native, but is listed as naturalised in all states by the Australian Plant Census (APC) – see below. For those who are not aware, the taxonomy and nomenclature adopted for the APC are endorsed by the Council of Heads of Australasian Herbaria.

#### CHAH (2009), Australian Plant Census: - Q 🖌 APC 🔺

nomenclatural synonym: *Panicum didactylum* (Willd.) Kunth *S* taxonomic synonym: *Panicum sanguinale* var. *brevispicatum* Maiden *S* taxonomic synonym: *Digitaria didactyla* var. *decalvata* Henrard *S* **APC Dist.:** WA (naturalised), Qld (naturalised), NSW (naturalised)

# So how can you find out what the current state of play is with scientific names?

- Go to any species page in NSW PlantNET.
- Click on the hot-linked APNI\* after the scientific name this will take you to the APNI (Australian Plant Name Index) site.
- Scroll down the APNI page until you see 
   APC. In this case, the species name used in NSW PlantNET is endorsed by the Council of Heads of Australasian Herbaria. The APNI page will also list in which states the species is regarded as native or naturalised.
- If you don't see the APC tick of approval, go to the bottom of the species listing and click on the last taxonomic synonym (example below is from the *O. aemulus* page).

## CHAH (2016), Australian Plant Census: - Q

taxonomic synonym of: Oplismenus hirtellus (L.) P.Beauv. 🔗

This will take you to the APNI page with the current name as endorsed by the Council of Heads of Australasian Herbaria. For example, on the *O. hirtellus* page you will see the APC tick of approval and information on which states the species is native or naturalised in and whether there are disagreements between states on the name.

### Accessing species keys in NSW PlantNET

If you want to work out which plant species you have, you can access species keys in 2 ways

- Go to any species page and click on the hot-linked genus name.
- Click on Identification Keys in the main menu. This way will also allow you to access family or genus keys.

PlantNET	
FloreOnline Introduction Plant Name Search	NEW SOUTH WALES FLORA ONLINE
Spatial Search Identification Keys Classification Glossary	Digitaria didactyla Willd.

#### What can you do if NSW PlantNET keys are out of date?

It's not unusual to see whole stacks of species not included in keys because the species were only described after the key was created (e.g., https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl. pl?page=nswfl&lvl=gn&name=Solanum).

In this case you can contact the herbarium and they will often give you a link to a current key or provide you with a pdf version of it. Their contact is botanical.is@botanicgardens.nsw.gov.au

#### **Pronouncing scientific names**

Botanical Latin is a written language as spoken Latin has long been dead (i.e., no native speakers still exist). That takes the pressure off of us and here's why!

There are no Latin native speakers to tell us whether the way we are saying a word in the correct way. In other words, no one can be completely certain what is the right way so we are all guessing to some degree!

Gardeners often say Latin names differently to botanists (https:// www.howtopronounce.com/callistemon) and New Zealanders say them differently to Australians and to Americans. There is even a classical and reformed way to pronounce names (stick



Grass ID workshop May 2022 Harry Rose the Grass Guru, and AABR organiser Suzanne Pritchard



with the classical! http://www.calflora.net/botanicalnames/ pronunciation.html. The only rule I hold to is "say the names the way other people around you say them" (https://depts. washington.edu/hortlib/pal/pronouncing-botanical-and-latinnames/).

However, two sites which I find useful for pronunciation when I have no clue how to say a name are: https://www.howtopronounce.com/ https://davesgarden.com/guides/botanary/

#### Fun facts:

The technically correct Latin pronunciation for the pine genus (*Pinus*) is "Pee - nus". Try that out when you're next talking about the massive pine tree growing in the park!

The "correct" way to say *Themeda* is TEM-e-da. See how often you get corrected when using that pronunciation!

# Why you should send plant samples to the Sydney Herbarium

On a recent trip to the NSW northern rivers, I stayed at an Airbnb at Goonellabah, near Lismore. On walking out the front door, I spied small bluegrass (*Dichanthium tenue*) growing profusely on the roadside embankment. This has only been recorded 3 times in the Lismore-Alstonville region according to official records, even though it is a common species locally.

Next door in the lawn was creeping bluegrass (*Bothriochloa insculpta*), which only has one official record for NSW (in the upper Hunter). This species was introduced as a forage grass and is now naturalised in the north coast. But you wouldn't know it from the records!

Finally, all along the road I was staying was lobed bluegrass (*Bothriochloa biloba*). This species has no records for the north coast. Maybe I was just lucky finding the only occurrence of it on the north coast. More likely, it is more widespread, but just no-one is sending samples to the herbarium.

# Planning for a Global Regen network – and we are seeking early feedback

People all around the globe – particularly Australia, the Phillipines, Thailand, India, Africa, South America, Canada and Europe - are using natural regeneration in restoration. But a common complaint is that there is still far too little acknowledgement of the importance of natural regeneration in teaching and guidelines on restoration.

So a few of us are planning to set up a global network to raise the profile of using natural regeneration in ecological restoration (and share information among practitioners and researchers). Currently the proposal is for it to be a formal subgroup of the international restoration organisation the Society for Ecological Restoration\_(SER)

If you are interested in being part of this network please consider filling in this short survey\_about whether you would potentially like to join. (If you don't like surveys please just reply to globalregen2030@gmail.com

(Note members of a SER network would need to become a member of SER - but note that SER now offers two low-income membership rate options - one free - provided on an honor system.

Tein McDonald On behalf of the Organisers



Was my experience unique? No! Just check the records for giant coolatai, grader grass and Hymenachne (above) for the north coast. All are commonly occurring species with very few records.

Herbarium samples are the only records we can be absolutely sure are correct. Other records (e.g., from botanical surveys) are only as good as the person recording them. I know there are huge numbers of misidentified records around; just check the large overlap of *Aristida ramosa* and *Aristida personata* records in the Bionet Atlas.

Without herbarium records, we don't know when and where plants arrive or disappear or how abundant and widespread they are. So, get out there identifying plants and sending samples to the Sydney herbarium (https://www.rbgsyd.nsw.gov.au/science/ plants/plant-information/collecting-plant-specimens).

## **Further information**

Contact Harry Rose on 0428437158 or hrose.nswdpi@gmail.com

#### Purchasing copies of Grasses of Coastal NSW

Go to https://www.tocal.nsw.edu. au/publications/field-crops-andpastures/grasses-of-coastal-nsw. Cost is \$30 + postage. Discounts are available for purchases of 10 or more I believe, so enquire on 1800 025 520.

Other books on grassses are also available at https://www.tocal. nsw.edu.au/publications/fieldcrops-and-pasture







# Natural Regeneration isn't always

# **Spontaneous:** there are tricks to optimising natural recovery

# Tein McDonald and Rhonda James (AABR)

Bush regeneration aims to use natural regeneration in ecosystem restoration - but it is not simply a choice of planting or leaving a site to regenerate spontaneously. Some sites need some intervention to facilitate or assist natural regeneration.

#### **Biological tips to optimise regeneration**

### 1. Identify the natural recovery mode of the ecosystem

We see natural regeneration from two sources – from the site's own soil seed and bud banks on one hand; and seed being brought onto the site by fauna, wind, or water (colonisation) on the other.

Therefore, to trigger regeneration where it may be stalled, we need to understand how the species have evolved in the face of natural disturbances, competition and resource changes (e.g. habitat features, water, etc). We can then try to mimic those disturbance regimes, degree of competition and resource provision.

First examine your site and its species – thinking about how it would normally recover in the face of natural disturbances or changes in resources.

#### 2. Apply treatments that mimic these to trigger germination

In rainforest we can use existing weeds to attract native colonisation by fauna spreading seeds; whereas in sclerophyll or other fire-adapted ecosystems we can use fire to assist

regeneration. Wetland, on the other hand, often needs episodes of flooding and drying to promote regeneration.

In all cases, weed removal will typically be required to remove the competition so native plants can survive. Keep niches in good condition for colonisation or germination and carry out regular follow-up weeding after rainfall in each growing season. (However, in rainforest sites, some weed may facilitate recovery on an otherwise bare site, so time weed removal to that point where a facilitating weed becomes a competitor.)

All sites can also benefit from installing 'traps' (including fauna habitat) to encourage visitation of fauna carrying seeds. In rainforest sites, leave dead trees or shrubs standing to provide perches for birds on these. In other cases, we can create rough conditions on the soil surface or cracks to allow colonisation.

# 3. Adopt strategies to optimise recovery given that restoration resources are always limited

It is always wise to work to expand the better condition areas before launching into areas of high degradation. Starting in weaker areas will consume your resources without a lot of gain.

Limit the area of your work to match your follow-up weed management resources, as each zone will need many, many repeat visits. (This need will reduce as the condition of the site improves.) Progressively expand into new areas as your follow-up weed management resources become freed up by the improving condition of the original zone.

## **CASE STUDIES**

## 1. Examples of long cleared, apparently 'hopeless,' cases that have been helped to naturally regenerate

**Rocky Creek Dam near Dunoon in northern NSW** was converted to a regional water supply catchment in the 1950s, after being managed as a dairy farm for well over half a century. In the 1980s, restoration practitioner Ralph Woodford pioneered methods to assist regeneration solely by removing weeds (including tractor-slashing lantana during the dry season). Swathes of lantana had totally dominated the exotic pasture by the 1970s, having been spread by birds. During this weedy phase birds had also spread both native and weed seed into the lantana, so when the lantana was removed, these regenerated. The weeds were subsequently managed, leaving dense stands of colonising rainforest trees that increased in height and successional maturity over time.

In the photo, the dairy farm foundations can be seen, which is evidence that the sites were cleared and used for farming. On this site, 35 tree species (mainly mature phase by 24 years after clearing the lantana) had regenerated and now dominate the site. There are many hundreds of hectares of retired agricultural land in this habitat that have been treated in this way particularly those that have



become dominated by camphor laurel or lantana. See the EMR Project Summary HERE



Marra Creek NSW near Nyngan in western NSW in the semi-arid lands is a totally different landscape. The topsoil has been completely removed by wind as a result of overgrazing in the late 18<sup>th</sup> century. The sites had not recovered many decades later as the hard, clayey soil surface was impermeable to water or seed. The NSW Soil Conservation Service developed over many decades a technology using road graders and laser levellers to create bunded ponds which captured about 10 cm of water after rain. The water could then soak into the ground which would dry out and create deep cracks and niches where windblown native seeds could lodge and germinate (as it was till moist in those cracks). Typically, within about 18 months approx. 15 native species would colonise these ponded areas. Over the last 35 or so years, the Marra Creek landowners have restored 42,000 hectares of scalded rangeland by constructing 84,000 waterponds.



**Gap Road wetland near Woodburn in northern NSW** is a typical small holding of 10 hectares used for grazing for some decades prior to conservation-minded landholders purchasing the property and commencing restoration. Previously, the forested wetland of sclerophyll trees, shrubs, sedges and forbs appeared completely converted to exotic pasture dominated by setaria grass (*Setaria sphacelata*). The grass was sprayed to start the process of disturbance and regeneration but also to provide enough fuel for a fire. The site was burnt, with almost total setaria seedling cover coming up after the burn. Consistent spot spraying revealed a great number of native plants and with each follow-up weed treatment the site was converted to very high native cover within 18 months, gradually colonising the site. These were largely sedges and forbs from the soil seed bank, but trees and shrubs also colonised from nearby remnants. After two years there were 35 native ground covers and seven woody species illustrating what can result from interventions that mimic native recovery followed by rigorous competition management. EMR Project Summary HERE





'Scottsdale' near Bredbo in the NSW

**southern tablelands** is a previously grassy woodland property that had been grazed by sheep for over a century prior to purchase by Bush Heritage Australia for conservation. At acquisition, the lowlands of the site were totally dominated by African love grass and serrated tussock. At one particular site, 'Rutidosis Ridge', there appeared to be 90% cover plus some bare ground and no evidence of a native population.

The site was aerial sprayed in winter using the herbicide flupropanate sprayed at a low rate which would affect only those weeds. The



thatch stayed on the ground for three years until burnt by a wildfire in the summer of 2019-20. At this stage, the site was identified as having potential for natural regeneration as many natives were seen coming up after the fire as well as weeds. Subsequent spot-spraying (and some hand removal) of weeds over 18 months has converted the better areas of the site to high cover levels of approx. 50 native ground cover species on the site. EMR Project Summary HERE

#### 2. Two not-so-familiar examples: our own neighbourhoods

#### North Ridge reserve Cooma NSW - Grassy woodland

In autumn 1990 the site appeared totally dominated by African love grass (*Eragrostis curvula*) and showed very little evidence of native species except small amounts of kangaroo grass (*Themeda triandra*). Planting was considered and plants ordered as a precaution in case insufficient regeneration occurred after treatment by community volunteers.

Council undertook initial spraying of African love grass with flupropanate in winter 2019. After reasonably good rains in late winter/ early spring coupled with bi-monthly follow-up spot spraying of a range of weeds, high levels of regeneration of 35 native species occurred by 18 months. Planting was deemed not necessary, and the site is now ready to involve community members in hand weeding. The involvement of community members will share the knowledge about the dynamics of natives and the weeds and how weeds can be removed in a way that can help sites to regenerate.





East Street Cooma NSW – Private land

While the entire 3.5 ha native grassy woodland area was treated, two subsites had experienced many decades of diffuse peri-urban impacts – probably including some sheep grazing but also overgrazing by macropods and rabbits. Both had outbreaks of the introduced cotoneaster (*Cotoneaster* spp.) and orange firethorn (*Pyrocantha* spp.) which are spread by birds. In the summer of 2019-20, regeneration potential was equally uncertain in both subsites.

The first of these subsites, 'Rabbit flat', was a very bare site with scrappy weeds, many patches of rabbit dung and the beginnings of sheet erosion. After laying (along the contours) branches of cut and poisoned Cotoneaster - plus regular spot spraying and two seasons of good rainfall - there have been strong regeneration results.

The second subsite, 'Roo flat', also had the beginnings of sheet erosion and differed only in that it was a campsite for the kangaroos rather than rabbits. Litter (comprised of eucalypt bark and leaves) was imported on to the site (sourced from bushfire prevention rakings from around the house) and branches of Cotoneaster laid down to deter kangaroos. The site was spot-sprayed regularly, the *Pyracantha* was poisoned the following summer and is now dead

This article is taken from a talk at NSW Landcare and Local Land Services Conference 2022 Rethink, find link Renew and Recharge. Photos supplied by the authors.

For more Project Summaries (published as part of the journal Ecological Management & Restoration) visit https://site.emrprojectsummaries.org/



# 21st WEEDS CONFERENCE, ALBURY Combined NSW and Victoria Weed Societies 21-24 March 2022

# Jane Gye AABR

Two days of diverse and informative presentations, with a hardto-pick field trip selection on the third day, made for a rewarding trip to Albury, in southern NSW on the border with Victoria. The warm sunny days showed off the Riverina and Albury (a beautiful rural city of fine buildings) at their best after La Nina changed the country from brown to green.

Several talks focussed on biological controls. Of particular interest to bush regenerators and restorationists has been the development of successful controls for a number of devilish weeds including Madeira vine (*Anredera cordifolia*), Paterson's curse (*Echium plantagineum*), wandering Trad (*Tradescantia fluminensis*), and the aquatic weed Sagittaria (Sagittaria platyphylla).

Other controls under trial are promising for blackberry (*Rubus fruiticosus* sp. *aggregate*), serrated tussock (*Nassella trichotoma*), and possibly ox-eye daisy (*Leucanthemum vulgare*) which is affecting Kosciuszko National Park and other natural areas.

A NSW Department of Primary Industries publication, *Biological control of weeds: A practitioners' guide for south-east Australia* is worth a look as over 30 weeds are listed. To quote from it 'the Australian biocontrol program is one of the most spectacular successes in weed biocontrol globally...financial returns on investment up until 2005 was 23:1'

Other potentially valuable research presented is on developing a risk assessment tool for prioritising management of exotic perennial pasture grasses (EPG) which invade native grasslands, and its results should be of interest to bush regenerators when available.

An interesting talk discussed a lateral approach to generating better community environmental awareness and action, which resulted in the formation of the Victorian Blackberry Taskforce. The problem of blackberry in a rural community was found to be a more galvanising issue than the broader approach of Landcare, and has helped provide an effective framework for community support, including post the Black Summer Bushfires which severely affected north-eastern Victoria.



Above: *Eucalyptus camaldulensis* beside the Murray River, Yindyamarra sculpture walk, Albury Photo Jane Gye

Plantsure – Gardening Responsibly is a project in part funded by the NSW Environmental Trust to develop a voluntary scheme for nurseries to allow them to certify plants that are of low environmental risk, backed by science provided by Macquarie University. The project is due to be launched in September 2022. This has been many years in the making, and it is hoped that it can be rolled out nationally.

A presentation on saturated steam treatment of mother-ofmillions (*Bryophyllum* sp.) and Singapore daisy (*Sphagneticola trilobata*) showed the treatment to be a successful and environmentally-friendly method on degraded bushland sites in coastal sites in northern NSW. Mother-of-millions was treated in two stages six months apart. The treatment was also used successfully on a problematic weed in Brisbane – dyschoriste (*Dyschoriste depressa*). https://weeds.brisbane.qld.gov.au/weeds/ dyschoriste

The field day included a demonstration of aerial spraying by helicopter, visits to the renowned botanical gardens, and a walk along the Yindyamarra sculpture track, where Aboriginal artists tell stories of their living culture. The track follows the Murray River to Wonga Wetlands and despite two centuries of degradation, the inherent natural beauty remains in the old Murray River Redgums (*Eucalyptus camaldulensis*) which line the banks. The area is being maintained by Albury City Council's Aboriginal team members who remove weeds, build tracks, install signage and more. https://www.alburycity.nsw. gov.au/leisure/sport-and-recreation/walking-and-cycling-trails/ yindyamarra-sculpture-walk

Various displays of applications and information on tools which might be applicable for practitioners were exhibited, including safer ways of storing and applying herbicides.



Above: Sculpture on the Yindyamarra walk, Albury Photo Jane Gye



# What's on our member's minds?

# Noela Kirkwood – Gardening Australia – Love'm or hate 'em

There was a young regenerator many years ago (around 1994) who referred to Gardening Australia as 'Gardening Czechoslovakia'. We had a big laugh about it. Of course, he was commenting on the fact that there was little inclusion of Australian native plants in their programs.

Many more years down the track I still look forward to watching it, but with a foreboding at which weed or potential weed they will promote next!

My latest beef is the program aired on 1.4.22 – 'My Garden Path, Diego Bonetto, Plant Forager'. Shock and horror! The so-called Environmental Educator was lauding the benefits of *Anredera cordifolia* (Madeira vine) as an edible plant whilst at the same time acknowledging it is a weed. I think I would choke if I attempted to eat it! Gardening Australia (GA) seems to justify eating edible weeds as another form of gardening. There is no acknowledgement of the significant cost to the economy of invasive species.

Disgusted, I was motivated to write to GA pointing out they had a responsibility to educate their many viewers and support volunteers who give up their time caring for their local bushland. Just providing a rider popping up briefly under a known weed 'Check before planting, this may be an environmental weed in your area' is an abrogation of responsibility.

I'm not expecting a reply from GA as their website states that they cannot reply to all requests and in 1998 when I protested at their promotion of *Hedychium gardnerianum* (ginger lily) they responded by saying 'your letter will be passed onto our researchers' I didn't hear any more.

Another many years ago, I wrote to Don Burke (Burke's Backyard) complaining that one of his presenters was suggesting to a listener that they plant *Dolichandra unguis-cati* (Cat's claw creeper) on a rockface. He was quite sympathetic and shocked at such a suggestion. He conceded that the nursery industry was negligent in selling certain plants.

I would've thought we had enough plants already without importing more.

On the other hand, GA comes up with some wonderful scientific programs covering native plant cultivation, citizen science projects, National Parks, nurturing wildlife, indigenous projects, etc. It is an enigma.

Former Premier, Bob Carr, is quoted as saying 'Some residents who live adjacent to bushland are either bad, mad or a combination of both', or perhaps, like Hamlet, they're 'but mad North-north -west'.

My hero, Tim Low, referred to 'doughty weeders working tirelessly around Australia to protect precious bushland remnants from advancing walls of weeds'. I like this title and was motivated to re-read his 1999 book Feral Future and to find how little has changed. He chastises nurseries and garden experts for continuing to sell and promote known fence-jumpers. Also, botanic gardens as a serious source of new plants, particularly if located near bushland. I find this upsetting as I have really appreciated the Royal Sydney Botanic Garden's Botanical Identification Service. They have generously identified many specimens I have sent to them over the years. And yet, their nursery is selling some rather dubious plants, e.g. in the Family Acanthaceae which has some really weedy genera. A friend reported seeing new plantings of Chlorophytum outside the shop. The name of the game seems to be easy to grow, bigger, brighter and better!

Tim also states that we should see in every species a potential weed and that gardening is damaging Australia's environment more than mining - the McDonaldisation of the biosphere.

But he also gives hope by saying 'we can never evict all the pests we already have but we can try much harder to keep new ones out'.

There is also hope in the new initiative by Professor Michelle Leishman called Gardening Responsibly.

I guess I'll still keep watching GA with apprehension but at least it keeps me on the ball and something to whinge about!

# **Biological control of weeds:** A practitioner's guide for south-east Australia

Australia has successfully used biological control (biocontrol) for weed management for a long time. It has proven to be environmentally friendly, self-sustaining, and cost-effective.

This manual will assist weed practitioners who are interested in utilising and maximising the benefits of weed biocontrol as part of their weed management plans in

south-east Australia.

The key steps for undertaking weed biocontrol programs for more than 50 weed species in southeast Australia are addressed, as well as providing other important information on weeds and biocontrol.

This document is not fully web accessible, but you can request a copy from this webpage or contact weed.resource@dpi.nsw.gov.au for more information.



# Advisory list of environmental weeds in Victoria - update 2022

Invasive plants present a serious and ongoing threat to Victoria's biodiversity. A 2022 updated advisory list of environmental weeds in Victoria is available listing over 1,800 plants.

The advisory list format is a searchable and sortable Excel

spreadsheet along with a description of the objective 'expert system' for ranking environmental weed species with respect to management urgency.

Its purpose is to help public land and biodiversity managers with the relative risks posed by different environmental weeds and the relative urgency of managing them across Victoria's natural ecosystems.

Download: Advisory list of environmental weeds in Victoria 2022 (Excel, 4.5 MB)



# AABR Bush Regenerator Accreditation - more relevant now than ever

For millennia, the Australian bush had been managed by First Nations people within its resilience limits, thus avoiding degradation. Over the last 200 and more years, clearing, introduced plants, animals and numerous other threats have degraded and diminished the remaining bush. Many attempts have been made to try to reverse this degradation through attempting and improving restoration, but the evolution to achieve successful approaches has been slow.

In the 1970s and 1980s the restoration practice of bush regeneration for assisting the recovery of degraded bushland was developed. It proved to be highly effective and efficient, relying on the inherent ability of ecosystems to repair and restore themselves when threats such as weeds were removed, often triggering germination and resprouting of natives.

However, there was concern that many people claimed to be able to restore degraded bushland, yet had not learned the skills of (i) unlocking and sustaining the bush's regenerative potential and (ii) using limited restoration resources efficiently. This led to the formation of AABR in 1986 and its **Bush Regeneration Practitioner Accreditation Scheme**, the first and only one of its kind in Australia.

AABR Accreditation is not to be confused with Membership of AABR (all interested people can be members of AABR). Nor is it to be confused with an 'accredited' qualification such as Cert III-V in Conservation and Land/Ecosystem Management (CLM/CEM).

For those who may want to pursue a career in bush regeneration and ecological restoration, or have their knowledge, skills and experience recognised, AABR Accreditation is a desirable goal requiring a higher level of achievement than a course alone.

AABR Accreditation provides assurance to an employer, contractor, or land manager that an accredited bush regenerator has the skills, knowledge, and experience to carry out regeneration of degraded natural areas effectively as part of a team.

Accreditation is awarded to an individual, not a company. A successful applicant is one who holds AABR's 12 competencies. Confirming these competencies in an applicant is generally done through a detailed field assessment, carried out by two AABR assessors. However, these skills may be assumed with the successful completion of a Cert III CLM/CEM course (from campuses that we recognise as delivering the course in a bush regeneration industry context) and at least 500 hours of bush regeneration (gained under the mentorship of an AABR-recognised supervisor).

The principles of bush regeneration help us in assisting the natural recovery processes in bushland. They apply at any scale, from a suburban street verge to a national park, from rainforest to desert, and apply to the long-term management of revegetated areas. Hence AABR's vision is to gradually expand the Accreditation Scheme across Australia in the long term. Currently AABR assessors are most readily available along the east coast of Australia from SE Queensland to the NSW South Coast, with expansion into Victoria underway.

One of the constraints to the rapid adoption of AABR accreditation across Australia is the fact that only a few Registered Training Organisations (RTOs) meet AABR's requirements for delivering CLM/CEM courses in a bush regeneration industry context. Availability of the appropriate formal training across the nation is a challenge. While online training may make the theory components of the courses more accessible, the field experience components of the course remain inaccessible in many parts of Australia. AABR aims to pursue ways of expanding training access by helping RTOs to overcome these hurdles.

One often-overlooked aspect of AABR Accreditation is that it can provide a pathway to, or through, employment. For example, a person working with an AABR-Accredited bush regenerator may gain the 12 AABR competencies and hours needed to attain AABR Accreditation to add to their resumé. This can potentially lead to a higher level position. Equally a volunteer working under a bushcare trainer with AABR Accreditation can gain the competencies and count the hours towards their own Accreditation, thus opening an employment pathway.

A number of local councils and government agencies now require or see as desirable, AABR Accreditation for supervisors of relevant contracts. It is likely that this requirement will, over time and as Accreditation becomes more available, spread more widely among land managers to improve practice and hence biodiversity outcomes.

To achieve this, AABR will be undertaking a strategy of communicating the benefits to both employers and practitioners. This will seek to raise awareness of the benefits of AABR Accreditation to the ecological restoration industry as a whole. AABR sees the role of bush regeneration as key to assisting natural recovery in many fields of nature conservation. Collectively we can turn around Australia's declining biodiversity - particularly in this UN Decade on Ecosystem Restoration.

More information about Accreditation can be found at https://www. aabr.org.au/about-aabr/accreditation/. The list of AABR's 12 Bush Regeneration Competencies can be downloaded from this page.

Jane Gye and Tein McDonald, AABR Board Members, May 2022

# Getting to know the Noisy Miner *Manorina melanocephala*

Noisy Miners are well known. They can be very aggressive and defend their 'patch' from other birds especially other species of honeyeaters which are vigorously chased away. Many other small birds are also driven from the area.

La Trobe University have produced an informative brochure about these birds, covering why the birds have become a problem and what can we do about it?

A must read for those who see these birds in action in the bushland.

Download HERE





# Books Georges River Blues Swamps, Mangroves and Resident Action, 1945-1980 **Heather Goodall**

So many of the sites that bush regenerators work on, especially in urban and town areas, have been threatened with all sorts of plans which involve destroying the bushland, and have survived by the actions of conservationists, local residents and communities. Much of this book is about the battles people fought to defend the Georges River, which is in southern Sydney and flows into Botany Bay.

The book also talks about and has great photos of the river playground in the years before World War 11. The lower Georges River, on Dharawal and Dharug lands, saw the aboriginal population badly impacted. The river became a place of fishing grounds, swimming holes and picnics in the 'pleasure grounds.' After the war, the pressure was on for development, and the water, picnic grounds and the bushland were threatened. Destruction of salt marshes, mangroves, pollution, and use of bays for rubbish tips all affected the river badly. Councils wanted to solve their garbage problems by bulldozing mangroves and bushland, dumping garbage and, eventually, building playing fields and golf courses.

Local people campaigned to defend their river and some of the bushland was saved. These suburban resident action campaigns have not always featured in histories of the Australian environmental movement, which often talk about saving distant 'wilderness.' One well known story of activism in Sydney is Kelly's Bush at Hunters Hill – saved by a group of 13 housewives teaming up with Jack Mundey from the Builders' Labourers Federation and their Green Ban in 1971. An earlier fight was in 1967, when Earlwood residents staged a successful protest that saved a sandstone outcrop known as Nanny Goat Hill from being levelled for runway fill at Sydney airport.

This book is a fascinating history of activism and of the Georges River and well worth reading. The book can be bought in hard copy and there are a number of 'Download/view free formats'.

Disappointingly the need for activism doesn't seem to stop. Currently on the George's River a property called Glenlee is under threat. Go to the Friends of Glenlee website to find out more. https://www.saveglenlee.com



AABR had a stall hosted by Sally and Mitch, at the Dragon Dreaming

Festival 2022, held in collaboration with the Regrowth Tree Planting Festival. Held at Wee Jasper near Yass, NSW at the start of April 2022, the 4 day festival of music, arts and other activities also incorporated 'leave a positive trace' with tree planting. The stall created interest and a lot of interaction.

AABR can help with material for a display. Contact Suzanne admin@ aabr.org.au





The book is available at https://press.anu.edu.au/publications/series/world-foresthistory/georges-river-blues

Georges River Blues Swamps, Mangroves and Resident Action, 1945-1980

Heather Goodall

ISBN (print): 9781760464622 (online): 9781760464639 Publication date: Feb 2022 by ANU Press

Reviewed by Louise Brodie

Vale Carol Bentley Carol was an AABR Pioneer Regenerator and worked as a bush regenerator in Sydney, from the 1980's. As well as working with The National Trust bush management teams and Bradley and May, Carol spent most Saturday afternoons weeding with friends in various patches of local bushland. She was involved with a weeding program at Campbell's Crater (Kur-ring-gai National Park), and worked in Lane Cove National Park with another bush regeneration stalwart, Lydia Bell. Carol was very knowledgeable about Sydney flora, rain forest plants in other areas, ferns and birds. She continued to maintain her interest in what other people were doing, even after mobility problems forced her to slow down. Carol was a good friend and ready to share knowledge of plants and bush regeneration skills. Carol died in February 2021. **Toni Stevenson** 



# What's happening

# Korinderie Ridge Bush Regen camp Wednesday 3rd to Sunday 7th August 2022

The Korinderie Ridge community on the NSW far north coast is welcoming visiting regenerators back to this beautiful bushland property in August. (This is after two years hiatus where no visitors could be invited due to COVID - so the community carried out a pared down, locals only, regen week.)



Lantana is the focus each morning with the afternoon spent relaxing or visiting local sites. Camping gear is needed. To reserve a place or receive further information, please phone Rachel on 0493 407 260 or email regenweek@korinderie.org. au. More info: www.korinderie.org.au or

#### https://www.facebook.com/groups/123320521036743/

# Tuesday 23rd to Thursday 25th August 2022

# Sunday 25th to Thursday 29th September 2022

# **22nd Australasian Weeds** Conference A Weed Odyssey: **Innovation for the Future**

The Weed Management Society of South Australia (WMSSA), on behalf of The Council of Australasian Weed Societies (CAWS), will be hosting the 22nd Australasian Weeds Conference (22AWC) at Adelaide Oval.

Registration is now open

More information at https://eventstudio. eventsair.com/22AWC



# 2022 NATIONAL LANDCARE CONFERENCE POWER OF LANDCARE | SHAPING OUR FUTURE TUESDAY 23 TO THURSDAY 25 AUGUST, 2022

INTERNATIONAL CONVENTION CENTRE DARLING HARBOUR SYDNEY

Landcare champion and ABC TV presenter Costa Georgiadis will host the three-day conference event at the International Convention Centre Darling Harbour in Sydney

https://nationallandcareconference.org.au/



Australian Association of Bush Regenerators

Australian Association of Bush Regenerators Working with natural processes

# **The National Board**

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Secretary Jane Gye secretary@aabr.org.au

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Louise Brodie membership@aabr.org.au Website advertising

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**Victorian Branch** Enquiries please contact Rob at robscott@naturelinks.com.au or phone 0412 865 027

#### The Australian Association of Bush

Regenerators Inc (AABR) was incorporated in NSW in 1986, and has several hundred members from all over Australia. AABR is pronounced 'arbor.'

Our aim is to promote the study and practice of ecological restoration, and encourage effective management of natural areas.

All interested people and organisations are welcome to join. AABR members include bush regeneration professionals, volunteers, natural area managers, landowners, policy makers, contractors, consultants, nursery people, local, state and commonwealth government officersand lots of people who just love the bush and want to see it conserved.

#### AABR also offers accreditation for experienced practitioners.

AABR News is usually published in January, April, July, and November.

AABR C/O Total Environment Centre P.O. Box K61 Haymarket NSW 1240 0407 002 921 www.aabr.org.au

enquiries@aabr.org.au ABN: 89 059 120 802 ARBN: 059 120 802

#### **Membership fees**

Individuals \$35 (unwaged \$20)

- Organisations (does not confer membership to individuals in the organisation)
- business (< 5 staff) \$120
- business (5-20 staff) \$300
- business (> 20 staff) \$480 Government \$60

Not for profit

\$30 (or \$0 with newsletter exchange)

#### **Benefits of Membership:**

- discount admission to all AABR events
- four newsletters per year
- increased job opportunities
- discount subscription to the journal Ecological Management & Restoration
- opportunities to network with others involved in natural area restoration
- helping AABR to be a strong and effective force to promote natural area restoration, and support the industry.

# Newsletter contributions and comments are welcome

Contact Louise Brodie newsletter@aabr.org.au 0407 068 688 Opinions expressed in this newsletter are not necessarily those of AABR