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AABR NEWS

Australian Association of Bush Regenerators

working with natural processes

AABR AGM

Saturday 19th February 2022, 10am to midday



For more information, to view the agenda and register for the meeting go to

<https://www.aabr.org.au/event/annual-general-meeting/>

AABR Events - Register now

Walk and Talk

Lane Cove National Park, Sydney

Saturday 5th March 2022. 2-4 pm

Looking after Lane Cove National Park for the long-term – the role of community in successful regeneration projects.

Go to page 11 for more information and registration

On-site Drone Demonstration

Hunter Wetlands National Park (NSW), Hexham, NSW

Friday 11th February 2022, 9am-noon

Demonstrating Drones for Bushland Management

Go to page 4 for more information and registration

Grass ID Workshop

NSW Central Coast. Kariong Neighbourhood Centre, Kariong, NSW

Tuesday 29th March 2022

Grass ID with Harry Rose

Go to page 2 for more information and registration

Site Visit

Cooper Park, Woollahra, Sydney

Tuesday 5th April 2022

Cooper Park - council caring for bushland

Go to page 7 for more information and registration

President's Perspective

Welcome to the last newsletter of 2021. It has been a monumental year for the recognition of the need for ecological restoration and this recognition has been very publicly stated, through a number of major agreements, commitments, frameworks and programs. These include this year being the first of the UN Decade on Ecological Restoration <https://www.decadeonrestoration.org/>, the recognition at COP 26 in Glasgow of the need to preserve and restore forest ecosystems <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>, the release of the Global Biodiversity Standard <https://www.biodiversitystandard.org/what-is-the-global-biodiversity-standard/> and the update of the SERA Standards for the Practice of Ecological Restoration <https://www.seraustralia.org/standards>.

While this is good news, policies, agreements, standards and commitments are easy. Getting outcomes from these is difficult and rare. While the Australian Government is a signatory to the Glasgow Leaders Declaration, it has a poor history of following through on biodiversity commitments and plans. Their funding of biodiversity management is utterly inadequate and has been significantly cut over the last decade, their grant programs often fund poor ecological restoration practice and have ridiculously poor timeframes for implementation and are not evaluated. The same can be said for many if not most of the State and Territory governments.

To meet commitments and goals (let alone the actual needs), we need to have much greater accountability of governments to plan and fund adequately and to acknowledge and remedy the perversity that, while some of their policies, plans and programs promote conservation and restoration, these are dwarfed by government permitted (and in some cases encouraged) environmental degradation.

Even with the reality of the current state of environmental management and restoration in Australia, I want to remain positive

and see where AABR can contribute to positive outcomes. It is my strong belief that we should use this current recognition of the need for ecological restoration and the rhetoric that is attached to that, to help improve practice, to provide general and technical information to decision makers and the community, to work with other NGOs to encourage them to improve their environment restoration practices and to volunteer our time to constructively work with government when opportunity and resources allow.

AABR is already engaged in this and as the number of members who are willing to contribute some time and expertise increases, we can do more. Our *regenTV* program list continues to grow; we are one of the 13 foundation members of the Darwin Agreement (see the information later in the newsletter); we are actively engaged in working with governments to improve training for bush regenerators; we are providing an evidence based forum to provide information and discussion on the use of herbicide and other chemicals in ecological restoration; we have formed a group to develop technical and other information on reconstruction practice, which will include not only high end, larger scale reconstruction but also information for councils and landscape architects on how to maximise ecological benefit in park and streetscapes.

I am very open to talking with members about ways to engage through AABR to help facilitate positive outcomes from the opportunities mentioned above, and others. Our impact will be greater the more that we provide avenues for our members to act. I encourage any member with ideas or wanting to become involved (or preferably both!) to contact me at president@aabr.org.au

Peter Dixon

President AABR

Welcome to new AABR Members

Alan Hill
Alexandra Kalivodova
Alina Zwar
Alister MacLean
Anna Whitehead
Brendan O'Reilly
Clare Gray
Gabriel Paholski
Jacob Proust
James Young
Jeanette Howie
Jim Martin
Joab Wilson
Joshua Gray
Jyri Kaapro
Lesley Hook
Lorna Haig
Lorraine Jones
Luke Durrington
Lynne-Marie Darwin
Maree Lane

Patrick Lennon
Peter Flemming
Rachel Burchett
Robert Peacock
Ron O'Reilly
Roslyn Gillies
Sidneigh Skinner
Tichafa Mhiti

Organisation
ECoCollaboration

Business
EcoRestore
Southern Environmental

Congratulations on Accreditation
Clive Cox
Ash Folster
Kathleen Nube

Field trips in all States

Our grand plan! The first A in AABR is Australian. The AABR Board is keen to reflect our national charter in all we do, that includes the field trips and events that are on offer.

If you're an AABR member, especially if you're outside of the Sydney Metro area, and would like to host an event we can assist with the promotion and coordination of that event. If you have a project you'd like to share or would like to gather with like-minded AABR members we'd love to hear from you.

Are you organising a forum, conference, field day or training session that bush regenerators would appreciate? We can help support your endeavours and fulfil AABR's role in supporting the bush regenerators who care for the bushland.

Contact Suzanne at education@aabr.org.au to talk about how we can assist.

"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."

AABR Workshop - Grass ID

Harry Rose is back by popular demand to assist bush regenerators with their grass identification.

What will you learn the day?

How to:

- describe features of grasses that are important for recognition
- recognise a range of grasses occurring in the region
- recognise grasses posing a current and future threat to the region
- where to find information on the management of different species.

A morning tea break is included to provide an opportunity to connect with other bush regenerators. Morning tea is provided.

Please wear appropriate clothing for a field trip into local bushland: Hat, long pants, long sleeves, sun protection.

Cost:

- AABR Members \$55
- non members \$65
- students \$45

For more information and to register for this workshop go to

<https://grass-id-for-bush-regenerators-2022-03-29.eventbrite.com.au>

Tuesday 29th March 2022

Grass ID with Harry Rose

Kariong Neighbourhood Centre, Kariong, NSW

9 am to noon

Kariong is just off the M1 on the NSW Central Coast around 80 kms north of Sydney.

GRASS ID FOR BUSH REGENERATORS



PRESENTER: HARRY ROSE

AABR Victoria AGM

AABR Victoria held their AGM on the 9th December 2021

Members of the committee elected are:

- **Chair:** Rob Scott:
- **Secretary:** Alex Milicic
- **Committee members:**
 - o Steve Llewellyn
 - o Craig McGrath
 - o Alan Noy
 - o Kylie Robertson
 - o Joab Wilson
 - o Sharon Mason
 - o Jane Pammer

Rob Scott, the Chair noted the following:

The Victorian branch of AABR formed in 2020. Bimonthly meetings are brimming with ideas and lively and stimulating discussion from our board members who cover local government managers, TAFE lecturers, practitioners and business owners. The group met 6 times in 2021 and have been actively progressing projects such as:

- * building local membership and local networks. There are currently 199 Victorian members, 9 businesses and 6 councils an increase from 39 individual members in 2018
- * progressing the establishment of the accreditation program, the first cohort of accredited practitioners and assessors will be in February 2022
- * developing educational resources with videos on hand-weeding and site assessment in production;
 - the Understorey Management Project - the hand weeding workshop idea proposed by Darcy has finally got some legs thanks to Jane, who has prepared a talk for Nature Stewards. The notes Darcy prepared are also

being used to make a video by BERG (Balcombe Estuary Reserves Group). The plan is to make the notes into an AABR resource along with videos, as part of the wider topic of non-chemical weed control

- the site management film made limited progress with COVID lock downs slowing things down.
- encouraging use of the National databases for sharing of site data Biocollect, ALA (Atlas of Living Australia)
- facilitating a traineeship program to support agencies and business with skilled workers. The proposal to get a cohort of trainees together for next year gained support and will be pursued next year
- developing a mentoring program to address career path and longevity of expertise in the sector
- developing reconstruction guidelines for the restoration industry. The proposal to formulate Reconstruction Guidelines is gathering momentum with a need identified in the new CEM course for industry specific resources
- developing relationships to support cultural burning
- coordinating an action-packed calendar of proposed walks and talks planned for 2022. Several workshops and forums in the pipeline for 2022
- AABR Vic members initiated and chair the Chemicals in the Management of Biodiversity (CIMB) Working Group which meets monthly and hosted 3 well attended webinars around glyphosate - the politics, law, science and practicalities, off-label chemical use and the findings of the MAV report on alternatives to glyphosate trials.

If you would like to become involved, please contact Rob Scott robscott@naturelinks.com.au.

Tips & Techniques for Bush Regenerators

AABR will be holding a series of short webinars over the next 12 months. We will be co-promoting these with other organisations.

Do you have topics you would like to see covered in these short seminars?

Drones: RPAs in Environmental Management

The first speaker in the series of information sessions on tips & techniques for bush regenerators was Martin Bass from Drone-Wise Australia. Martin, an experienced aviator, commercial drone pilot and educator, brought us up-to-date on the technical capabilities of drones. This webinar was co-hosted with NSW National Parks Association (NPA).

Drones are known as RPAs - remotely piloted aircraft. Types are:

- **Multirotor** - more flexible and user friendly compared to fixed wing RPAs. The expensive ones have GPS and can stop in mid air until told what to do next. Multirotor are most commonly used. Different types of Multirotors, include Quadcopters, Hexacopters and Octocopters. An Octocopter has 8 motors and rotor systems for safety and redundancy in payload. A Hexacopter has 6 motors. Redundancy is a built in requirement for flying over built up areas - if one engine fails, the opposite one cuts off too so the drone is balanced and can get to ground safely.
- **Fixed wing** have good capabilities but cannot stop in mid-air, so need to fly them well to bring them back to ground safely. Types are straight wing, swept wing and delta wing. They can spend longer in the air, go for greater distances and at higher speed. They can also carry hi tech camera equipment and could be useful for bushland as they cover a lot of ground.
- **Vtol** drones have forward propulsion but can take off vertically.

RPAs are being used by local government for:

- survey building and assets;
- document coastal erosion, monitoring riparian zones;
- compliance/monitoring of tipping and dumping, and land use;
- wildlife mapping, weed and pest mapping;
- construction site planning and preparation;
- aerial photography and video for tourism, and
- disaster management, event security.

This aerial photography work has always been done using helicopters or aircraft. Drones now make this more affordable.

Stitching is used for surveying a large area. One photo means you need to go too high and clarity of photos is lost. So fly at a lower level and stitch photos to make one image. (MS ICE is a free Microsoft program but no longer available from Microsoft - possibly can be found elsewhere on web). More sophisticated programs are available either to purchase or subscription.

Video can be produced using a DJI Mini2. These fit in the palm of your hand and will take still photos too.

RPAs and the law

Rules apply for the use of RPAs, and fines are given. For information go to [CASA.gov.au/drones](https://www.casa.gov.au/drones). There is a regulatory approach to RPAs used for work. You must be accredited and licenced. RPAs must be accredited with CASA.

On-site Demonstration

Drones in Bushland Management
Friday 11th February 2022, 9am-noon
Hunter Wetlands National Park (NSW)
at Hexham near Newcastle.

COST : AABR Members \$5; Non members \$10; Students - free

Following on from the webinar on *Drones in Environmental Management*, AABR is holding an on-site demonstration of the capacity of drones in bushland management.

Phil Milling of Sky & Land Management will provide a demonstration and an overview of the practical use of drones in bushland management. He will cover how drones have changed the way his business operates, the economics, safety and potential uses of drones such as for precision weed management on aquatic and culturally sensitive sites or steep areas, along with scanning and monitoring applications.

You will see how drones were used to manage *Juncus acutus* infestation in the Hexham Wetlands, and land managers from Hunter Local Land Services and National Parks will tell how they use drones and the impact on their land management practices.

For more information and to register for this workshop go to <https://demonstrating-drones-2022-02-11.eventbrite.com.au>



This photo stitch example shows an MS ICE (image composite editor) stitch of 145 individual photos taken at 80 metres above ground level on a prearranged flight plan. (supplied by author).

CASA also has standard operating conditions. You must fly in accordance with CASA Advisory Circular AC 101-10

You can access the recording of the Webinar, which was held on the 5th December 2021

The recording can be viewed on the [AABR Website](https://www.aabr.org.au/portfolio-items/what-can-drones-do-martin-bass) through AABR's regenTV page <https://www.aabr.org.au/portfolio-items/what-can-drones-do-martin-bass>

Questions from the audience are answered in the video.

There are additional questions answered at the bottom of the webpage.

You can also see the recording on Youtube <https://youtu.be/cboyir5jwTE>

Using the National Restoration Standards

At the AABR Victoria AGM December 2021, Craig McGrath, City of Yarra's Biodiversity Officer shared how he aligns his awarded contracts with the SERA National Standards for the Practice of Ecological Restoration.

City of Yarra is an inner-city local government area in Melbourne. It has a population of 94,000, covers 19.4 km² with 263.4 hectares (ha) of accessible open space of which around 33 ha is managed as bushland. There are 209 plant species indigenous to Yarra, with threatened fauna including the grey-headed flying fox and the nankeen night heron.

The planets aligned in 2017 with consultants completing a Biodiversity Health Survey, the letting of a bushland maintenance contract and the SERA National Standards & Recovery Wheel being produced.

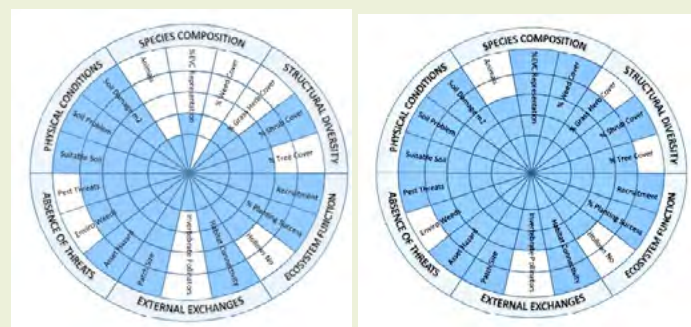
Inspired by the SERA National Standards, the City of Yarra overhauled its bushland maintenance contract to set up a contract based on outcomes (*not input based*). The contract has 4-year targets as set by council, and annual plans which are aligned to funding. The contractors work out how to achieve the targets.

Resources were Craig as the 1 EFT staff for all contract matters, including field auditing and evaluation, and a phone app for real time reporting & monitoring. There is also a consultants' budget for annual independent assessments.

Council incorporated the six 'key principles' in the standards which underpin strategic assessment of bush sites. Adaptive assessments for baseline data for the recovery wheel met with the problem of no naturally occurring benchmark to reference. Council used the *EVC/Bioregion Benchmarks for Vegetation quality Assessment* as identified by the consultants. (Ecological Vegetation Classes (EVC) are the standard unit for classifying vegetation types in Victoria).

The Fulcrum phone app has been set up to gain data which provides the information to be incorporated into the recovery wheel. Data recorded includes maintenance records such as labour hours, chemical use etc, monthly auditing and annual audits. Ongoing refinements of the customised phone/field app has provided real-time feedback supporting contractor responses and expanded monitoring detail to align with six main spokes on the Progress evaluation 'recovery wheel'.

Choice of the extent of an area to be incorporated into sites is important. One site chosen was bushland and was later expanded to incorporate a degraded area with Chilean needle grass and compacted soil, which required both soil treatment and revegetation. During this time the progress on the recovery wheel had to adapt to this.



The Recovery Wheel provides a simple visual picture of changes
Left: May 2017 and Right November 2021

Watch the video of the talk to get a full picture and detailed explanation of Craig's work at City of Yarra Council.

<https://youtu.be/4tugEURGbZ4>

Are you familiar with the National Standards?

The Standards are designed to encourage all restoration and rehabilitation projects in Australia to reach their highest potential. It uses a recovery wheel and a 5 star rating system as a simple and effective tool to evaluate and present how a restored ecosystem is performing compared to a reference community.

AABR's regenTV has videos on a number of presentations on the standards. Note there is now a second edition of the standards.

Easiest to find by going to the AABR webpage <https://www.aabr.org.au/> and do a search for standards.

Videos include:

<https://www.aabr.org.au/portfolio-items/setting-the-scene-introduction-to-national-standards-for-the-practice-of-ecological-restoration-jen-ford-aabr-forum-2016/>

<https://www.aabr.org.au/portfolio-items/how-the-national-restoration-standards-affirmation-of-native-ecosystems-as-references-can-strengthen-seras-function-as-a-broad-church-tein-mcdonald-sera-conference-2018/>

Download a pdf of the second edition

Standards Reference Group SERA (2021) *National Standards for the Practice of Ecological Restoration in Australia. Edition 2.2.* Society for Ecological Restoration Australasia.

Available at www.seraustralasia.org.



Revegetation preparation of the Chilean needle grass site showing that revegetation can be fun!
Photo supplied by the author.



Burning for Biodiversity

Joe Swallow, Naturalist

Burning to promote biodiversity has been around for millennia. It has taken many forms and I want to discuss my recent experiences which is to burn in the middle of winter with a gas flame gun. This is the typical timing of burning in desert regions but not the temperate south eastern part of the continent.

I am restoring the land around our house, being around a quarter of a hectare of Grassy Dry Forest. It is a warm northern facing sloping land in the Middle Yarra Region of Wurundjeri country. When we moved to the land in 1981, there was an overstorey a few decades old of red box *Eucalyptus polyanthemos* and yellow box *E. melliodora*; a middle storey of a few Yarra burgan *Kunzea leptospermoides* and black wattle *Acacia mearnsii*, plus a few herbs - bulbine lily *Bulbine bulbosa*, chocolate lily *Arthropodium strictum*, kidney weed *Dichondra repens*, variable sword-sedge *Lepidosperma laterale* and some native grasses - weeping grass *Microlaena stipoides*, kangaroo grass *Themeda triandra* and wallaby grasses *Rytidosperma racemosum* and *R. setaceum*, and rock correa *Correa glabra*.

My suburb historically averaged 740ml of rain a year, which had dropped to about around 400 to 500 during and since the Millenium drought years. For example, 2019 had 396 mls. Where we live has been recognised as one of the most fire prone suburbs of the world.

It can be difficult to un-couple the events that happen due to changing weather patterns, management actions and natural processes, and pin down why certain germination events occur. All that I can contribute by this article is my observations of my home garden restoration project which was not set up as a scientific experiment.

I decided to adopt and plant the most common shrub in bushlands nearby - plum-leaf pomaderris *Pomaderris prunifolia* - as my theme to revegetation as the front and back yards were destitute of shrubs except for a few of the fire prone burgan. During the Millenium Drought of 1997-2010, 40% of my eucalypts including some of the largest on the block died, mostly due to overgrazing by an over population of brushtail possum, and general difficulties in extremely dry conditions. This was after

the trees had previously suffered from die back and a weakening of condition from a resident bell miner population, until they left the residency of my yard in 1997.

I had worked in desert areas and was involved in cultural fires during the winter months working on country. I wondered how this fire regime could fit in elsewhere.

After the Millennium Drought, the pomaderris began to age and die with no sign of regeneration except for a small pocket of land of two square meters in the most precarious situation on a dry cliff face on my driveway where yellow box, hop goodenia *Goodenia ovata*, kangaroo thorn wattle *Acacia paradoxa* and wallaby grasses germinated and competed for sunlight.

I had been taking a proactive approach to the fire risk leaf litter by raking and removal on the approach of summer. This was a considerable biomass, some years producing eight wool bags of leaf litter from a quarter of a hectare of garden. I have houses nearby so was conscious of the overall neighbourhood safety. I was aware of the negative effects of removal of the leaf litter on



Burnt ground in August 2020 with Austral forgetmeknot (*Myosotis australis*) in the foreground and *Einadia hastata* which was the primary cover after burning.

the invertebrate populations but felt fire safety highly important, especially as I am involved in local conservation issues. I also wanted to meet community risk expectations whilst enjoying indigenous gardens with all their complexity and requirements.

In the winter of 2019 dominant grass weeds, panic veldt *Ehrharta erecta*, *Dactylis glomeratus* cocksfoot and others were sprayed then cut by a whipper snipper. I then undertook burning of dead stubble and green grasses in safe weather conditions after the removal of the leaf litter. The burning also offered good control of annual weedy grasses and herbs. Within a short while I began to observe new pomaderris seedlings which eventually numbered in the low twenties. These shrubs grew quickly despite the low rainfall and were accompanied by a few seedlings of black wattle, sweet bursaria and hop goodenia.

In the wet year of 2020 which saw 936 millimeters of rainfall, there was spraying again of panic veldt and *Oxalis pes-caprae* soursob; then removing fallen eucalyptus leaves; cutting the dead grass and burning on wet days or burning just after rainfall. This time the germination was spectacular with over 40 plum-leaf pomaderris germinating, doubling last year's numbers; more black wattle, sweet bursaria, hop goodenia and the unexpected mass germination of variable saw-sedge across the site which outnumbered the pomaderris. This sedge was a species from which I had no regeneration from previously during the 40 years of our residency here.



Site in November 2021: *Pomaderris prunifolia* seedlings from 2019 on the left and 2020's seedlings at top right. The luxuriant grass understory is *Rytidosperma racemosum* and *R. setaceum* wallaby grass.

All photos by the author

This year, 2021, with plentiful rain with already over 800 mls falling, the native grasses are expressing themselves in luxuriant growth, the pomaderris shrubs and the herb layer are booming along. Although it would be difficult to use a gas gun on any scale in bushland, I see the burning for biodiversity in the cooler, wetter months as something that merits further exploration and trialing in our bigger reserves.

AABR Site Visit

Cooper Park, Woollahra, Sydney

Tuesday 5th April 2022, 9-11 am

Cooper Park - council caring for the bush

Hosted by Woollahra Council

Meeting place - at the end of Kendall St Woollahra at entrance to Cooper Park

Cost: AABR Members \$5; Non members \$10, Students Free

On Tuesday 5th April, Rudi Adlmayer, Woollahra Council's Bushcare Liaison Officer will be guiding us through Cooper Park, Woollahra which is in a highly urbanised area of Sydney. Rudi will talk about the park, its history of bush regeneration and some of the strategies he has used there for the last 20 years with the bushcare volunteers.

Cooper Park is a fascinating area with a combination of sporting facilities, cultural values and structures build during the 1930's by unemployment relief schemes plus early bush regeneration. The Plan of Management for the park 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 will move through Cooper Park, a 15ha site with 12 ha of bushland, and look at some of the remnant bushland and discuss the history of ecological restoration in the park, then finish at the bushcare site to observe the restoration the group has made on a highly degraded site over the last twenty years.

Cooper Park is also the location of a 'Go Slow for a Mo' trail, a pop-up nature wellness trail designed to refresh your mood, energy and focus.

For more information and to register for this Walk and Talk go to <https://cooper-park-20-years-of-bushcare-2022-04-05.eventbrite.com.au>

AABRs Working Groups

AABR's strength is in its members and their experience, and AABR is establishing multiple Working Groups to progress projects. Members are welcome to contribute their expertise.

Contact Suzanne for more information admin@aabr.org.au

Accreditation Subcommittee

Oversees AABR's accreditation program.

AABR Victoria (Subcommittee)

Rob Scott is the Chair vicbranch@aabr.org.au

<https://www.aabr.org.au/about-aabr/aabr-branches/aabr-victoria/>

Chemicals In The Management Of Biodiversity (CIMB) Working Group

Meets online, on the 3rd Wednesday of the month, 7:30-8:30pm.

<https://www.aabr.org.au/aabr-projects/glyphosate-working-group/>

Education & Training Working Group

Advocates for appropriate training for bush regenerators and actively develops educational peer reviewed resources.

Marketing & Communications Working Group

To expand AABR's presence within the restoration sector in a variety of ways including across multiple social media platforms.

Membership Benefits Working Group

Reviewing AABR's fee structure, membership types and benefits.

Policies & Procedures Working Group

Overarching policies to support a national structure.

Walks And Talks Working Group

Oversee the events program and broaden locations and types.

Fundraising Working Group

To be ready to launch a campaign when Deductible Gift Recipient status is achieved.

Contractors Industry Working Group

This group of bush regeneration professionals will be mapping out where the industry is going, where we want it to be and how to prioritise getting there.

Get up to date on Glyphosate

The monthly meeting in November 2021 of the Chemicals in the Management of Biodiversity (CIMB) working group of AABR included two presentations. These covered the report on alternative glyphosate treatments, commissioned by Municipal Association of Victoria (MAV) and how one council incorporated the results into their work.

Report on Alternatives to Glyphosate

Associate Professor Lambert Bräu and Dr Lee Hudek

The authors of the recently released report present their findings.

Although glyphosate is used commonly for weed control including bush regeneration sites, there is increasing interest in alternatives due to community concern about the use of glyphosate.

Alternatives tested

For this MAV report, the analysis of alternatives was carried out in 2020 and looked at the seasonal effectiveness of nine non-glyphosate-based alternative weed management strategies. The alternatives were:

- glufosinate
- imazapyr
- MCPA + dicamba
- prodiamine
- pine oil
- clove oil
- nonanoic acid
- acetic acid + hydrochloric acid and
- steam

and were tested against untreated (negative) controls and glyphosate-treated sites.

The findings

Briefly the findings across all four seasonal treatments (winter, spring, summer and autumn), were:

- glyphosate and glufosinate reduced weed coverage (>65% after 4 and 12 weeks);
- imazapyr reduced weed coverage by >80% after 12 weeks;
- steam reduced weed coverage by >80% after 4 weeks, and after 12 weeks was shown to reduce weed coverage by >20% after the second application; and
- the MCPA + dicamba, prodiamine, pine oil, clove oil, nonanoic acid and acetic acid + hydrochloric acid treatments had mixed impacts on weed coverage.

How the results of the MAV/Deakin University Report impacted the decision of Kingston Council to overturn their glyphosate ban.

Lee James (Bushland Coordinator-Kingston Council)

Kingston City Council is in the south-eastern suburbs of Melbourne and has an area of approx. ninety-one square kilometres, population of approx. 162,500 residents and the largest and most concentrated industrial sectors in Victoria. Council manages 338 open space areas including Braeside Park (Parks Victoria) and Ramsar listed Edithvale Wetlands (Melbourne Water)



Minimal alterations to soil physicochemical properties were observed across the two sites for all treatments.

An assessment of impacts the different weed management strategies had on arthropod and microbial relative abundance showed minimal alterations - only steam was observed to reduce relative microbial abundance.

Glufosinate, imazapyr and steam may be considered alternatives to glyphosate for reducing weed coverage but may not be as effective or have undesirable off-target effects.

Overall, glyphosate provided the most consistent weed reduction at both sites over 12 weeks, without any recorded negative off-target or soil biota impacts.

The report *Comparative Analyses of Glyphosate Alternative Weed Management Strategies on Plant Coverage, Soil and Soil Biota* published in 2021 can be accessed at <https://www.mdpi.com/2071-1050/13/20/11454>

(You can download a report by the Invasive Species Council on glyphosate at <https://invasives.org.au/publications/glyphosate-a-chemical-to-understand/>).

For the full cover of this work, You can view the recording on AABR's website <https://www.aabr.org.au/portfolio-items/get-up-to-date-on-glyphosate/>

or

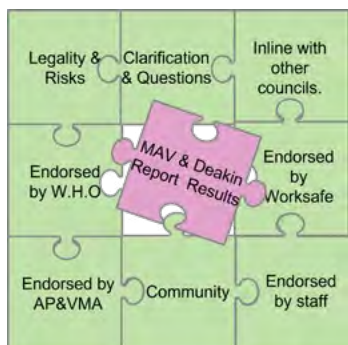
directly from our YouTube channel - <https://youtu.be/TC25GeRKgs0>

Lead up to Council Ban of Glyphosate

Weed control across the municipality has been an integrated management approach using a variety of methods - chemical, manual, mechanical and burning techniques. Over the years Council and its contractors have looked at a range of different herbicides, however continued to use glyphosate.

In 2016, Kingston decided to review its glyphosate use. This gained media coverage stating that council was rethinking its use of potentially cancer-causing weed killer.

Acting on a councillor request, in 2017, council officers trialled a new 'non toxic' herbicide Local Safe to replace the use of glyphosate on council's 115 playgrounds. At that stage there was no safety data sheet, was listed as schedule 6 and not approved for use in Victoria. Once approval for its use was obtained, the objective of the trials was to determine its effectiveness in comparison to glyphosate, and it was used according to directions. However, the herbicide failed to properly control weeds. The weeds continued to re-shoot and establish which quickly presented a tripping hazard within the playgrounds.



Above: A number of things required consideration and collaboration before finalising recommendations

Background to Lifting the Council Ban of Glyphosate

In October 2019, Kingston Council resolved to eliminate the use of glyphosate for the purposes of weed control in all 'open space' areas and to use alternatives.

Since that time, council used a variety of alternatives within its open spaces, including

- Steam in 13 selected high profile reserves
- Glufosinate (retail name Basta)
- increased manual weeding at a significant cost/limited effect
- Social Enterprise Co was engaged to maintain soft fall areas.

Council spent an additional \$1M at least on weed control over



Above: Information cards produced by Kingston City Council, come with the now familiar QR code which links to further information.

the 12 months following the ban decision across all open space. Most of this was through additional interim or temporary arrangements as the effectiveness of alternative weed control was unknown.

There was also the additional knowledge from the Municipal Association of Victoria (MAV) Alternative Trial Report.

Additional costs have been confirmed by the Deakin University and MAV research.

Glyphosate Ban Review

RECOMMENDATION adopted by Council

That Council:

- Endorse the selective use of glyphosate at low-risk locations;
- Endorse the continued use of manual weeding and steam weed control in playgrounds, childcare centres, preschools, and maternal child health centres;
- Note the review of Victorian WorkSafe legislation and feedback from the ASU and Council staff undertaking the activity; and
- Note the results of the Deakin University and MAV research report.

The report concludes '*based on the results of field trials, and taking into consideration cost, safety information and off-target impacts, glyphosate is considered to be the most effective weed management strategy of the different approaches scrutinised by this study.*'

A Communications & Engagement Plan was to be developed should the glyphosate ban be lifted.

In October 2021 Council endorsed the recommendations.

Communication has been improved by better signage and Information Cards for distribution to residents.

In addition, all Council staff and contractors applying the products will be appropriately trained and have the required Personal Protective Equipment.

For the full story of this work, the recording of the webinar is on AABR's website
<https://www.aabr.org.au/portfolio-items/get-up-to-date-on-glyphosate/>
 or
 directly from our YouTube channel
<https://youtu.be/TC25GeRKgs0>

AABR at the 2022 NSW Landcare & Local Land Services Conference

The 2022 NSW Landcare and Local Land Services Conference will take place from the 15-17 March at Twin Towns in Tweed Heads.

Congratulations Australian Association of Bush Regenerators

AABR has been selected as a finalist for the Australian Government Partnership for Landcare Award.

Thanks to Andrew Scott from North Sydney Council for nominating us.

The award finalists and winner will be announced at a gala dinner on Tuesday 16th March during the 2022 NSW Landcare and Local Land Services Conference at Twin Towns in Tweed Heads.

Presentation at the Landcare Conference

Two of AABR's highly experienced regenerators, Tein McDonald and Rhonda James are presenting at this conference on behalf of AABR

Their presentation is *Natural regeneration isn't always spontaneous: There are tricks to optimising natural recovery*

They will show examples of long cleared sites not far from remnant vegetation where what seemed to be hopeless cases were coaxed and cajoled into naturally regenerating. The experience of professional regenerators in rainforest, open forest, wetland and grassland will provide a range of tips on how to optimise regeneration in these ecosystem types, using knowledge of adaptations of species to the pressures and disturbances that have occurred in these ecosystems over evolutionary timeframes. Mention will be made of applying disturbances followed by comprehensive and timely weed control. When regeneration potential is limited for some or all species, informed reintroductions help move the site along the trajectory of recovery, although further ongoing 'regeneration' approaches can optimise outcomes.

AABR and the Restoration Decade Alliance

AABR is one of 17 Australian restoration organisations that have come together to form the Restoration Decade Alliance. The Alliance is a consortium of non-profit organisations committed to optimising the impact of the UN Decade on Ecosystem Restoration <https://www.restorationdecadealliance.org> (June 2021-June 2030). The 17 Foundation Member groups are signatories to the Darwin Agreement, established at the SERA 2021 conference in drawing in May 2021 and they subscribe to the [principles of the UN Decade](#).

The focus of the Alliance is on promoting reduction of environmental impacts and increased restoration activity carried out by community, industry, and governments. In keeping with this focus the Alliance is in the process of establishing four working groups on the following themes;

- (a) Influencing Policy,
- (b) Setting targets for the group and Australia,
- (c) RDA membership, and
- (d) Best practice in ecosystem restoration.

AABR is represented on the Influencing Policy and Best Practice Working Groups. It is hoped that as the Alliance activities build momentum that there may be opportunities for AABR members to be engaged in or even run activities and projects at the local and regional scale.

Note that Ecosystem Restoration is broadscale in its scope and includes not only ecological restoration for potential natural areas, but also improving ecosystem functionality where ecosystems are permanently modified and largely non-native. It also includes reducing impacts from societal consumption and from primary and secondary industries.

AABR is in the process of identifying roles where it can create the most impact for the resources we can commit. We are keen to play a role in advocating for best practice restoration. This particularly covers ensuring the inclusion of regeneration approaches in restoration, to engage in identifying where policies and programs work or don't work, encourage more and improved training and education in restoration skills and knowledge, and providing advice to other NGOs and government.

The RDA website is under construction and will be launched in January. You can view it here: <https://www.restorationdecadealliance.org>.

Several social media accounts for the RDA have also been established: [Facebook](#), [Twitter](#), [Instagram](#), [LinkedIn](#), and [TikTok](#).

Our President Peter Dixon is AABR's representative on the Alliance, but interested people can also directly contact the Alliance through its facilitator - Jess Garcia facilitator@restorationdecadealliance.org or through the Alliance website <https://restorationdecadealliance.org/connect-with-us/>



Where did the name Bushcare come from?

Bushcare is now used as a general term for volunteer groups working in bushland, mostly in publicly owned bushland, (as distinct from Landcare which was set up to work largely on privately owned agricultural land). The term has been adopted by many Local Governments and National Parks for programs supporting these volunteer groups. But how did the name arise?

In 1987, Ku-ring-gai Council, in Sydney, created the position of Bush Regeneration Officer to manage Council's bush regeneration program and their bush regeneration team. Tein McDonald, who held this position from 1987 to 1991 remembers how her role also expanded to include the coordination of bush regeneration volunteers.

"When I started in the role, Nancy Pallin was already working on one or two volunteer sites with the endorsement of Council. We recognised a good thing when we saw it so we decided to offer similar but enhanced support to other groups should they wish to form. Anyone who phoned Council to say 'something should be done about the weeds behind our house' was offered an opportunity to consider volunteering! So the ones who really started the movement in Ku-ring-gai were the volunteers themselves, particularly Nancy Pallin."

Tein played the role of Council's bush regeneration coordinator with great dedication for four years and helped to build up a sizeable volunteer work force. She coined the name '*Bushcare*' in a newsletter for the volunteers. The intention wasn't to change the name of Council's program but to point out to the volunteers that the work they were doing was '*Bushcare*'...in a similar way

to Landcare etc. Her manager, Rob Bennett, picked that term up with some enthusiasm and formalised its use.

On Tein's departure from Ku-ring-gai Council, a dedicated position to support the volunteers was created and the work was carried out under the banner of Bushcare.

The use of the name Bushcare spread as other councils followed suite in setting up support programs and encouraging volunteers to work in bushland on council land. It became the name given to these council-supported programs.

(As a separate initiative, for 5 years from 1997 to 2001, Bushcare was also used for a stream of grants through the Commonwealth run *Natural Heritage Trust* funded by the part sale of Telstra.)

Collecting our History

We know AABR members and all bush regenerators have memories and information that is interesting. As time goes by regenerators are keen to acknowledge and celebrate bush regeneration. AABR would love you to share these stories.

Do you have stories and memories of your introduction to bush regeneration? Can you recall milestones such as the start of bush regeneration work by paid teams and community groups in your favourite reserve? How and when did training courses start in your area? When did agencies start to implement restoration programs? What about the wonderful people you have worked with?

Let us know about them. Contact Louise at newsletter@aabr.org.au

AABR Walk and Talk

Lane Cove National Park, Sydney

Saturday 5th March 2022. 2-4 pm

Looking after Lane Cove National Park for the long-term – the role of community in successful regeneration projects.

Hosted by the Friends of Lane Cove National Park

Cost: AABR Members \$5, Non-members \$10 and Students free

Meeting place - opposite 114 River Avenue, Chatswood West (no park entry fee is required for this location).

For AABR's first Walk & Talk for 2022, the President of the Friends of Lane Cove National Park, Tony Butteriss, will take us on an educational saunter to see three sections of the River Avenue Bushcare site in Lane Cove National Park. Tony will be sharing the lessons learnt from a generation of restoration, highlighting the importance of the long-term community involvement in successful regeneration projects that the Friends of Lane Cove National Park have undertaken.

The River Avenue bushcare site has received numerous grants including two from the Environmental Trust, DPI Fish Habitat and a recent Federal Government Community Environment



grant. There is a mix of bush regeneration in areas that have good resilience and areas badly affected by past practices where the group has undertaken a program of community planting particularly utilising National Tree Day since 2019.

With the rallying cry of the UN Decade on Ecosystem Restoration 'What will you restore?' and a call to be part of the restoration generation, this explanatory walk will provide lots of lessons learned and highlight a critical element of this restoration project, a community drawn together for over a generation under the banner of *The Friends of Lane Cove National Park*, committed to the call and committed to restoration.

For more information and to register for this Walk and Talk go to <https://looking-after-lane-cove-np-2022-03-05.eventbrite.com.au>

Thirty years of volunteer bush regeneration in Lane Cove National Park

In 2021, the Friends of Lane Cove National Park celebrated 30 years of volunteering. Commencing in 1991, the small start to groups working in the park expanded rapidly after a fire in 1994 burnt 85% of the park.

The early 1990's, saw bush regeneration became more widely known and training courses expanded, there were many keen residents living and working around Lane Cove National Park in Sydney's north, who were enthusiastic about working in the park.

Volunteer work started with a community working breakfast in the park at Carters Creek on 10 March 1991, and several working bees followed over the next three years. Other groups started work and in order to be apply for grants a working group was formed and the Friends of Lane Cove National Park (FLNP) was formed thanks to the initiative of Nancy Pallin and Nan Goodsell.

The first meeting for this group was convoked on 28th December 1993 for the following month. However a week later the disastrous 1994 bushfires swept through Sydney and over 85% of the park was burnt. The inaugural meeting of the FLNP was not held until the following month on the 27th January 1994.

This fire resulted in a large influx of volunteers eager to help restore the park. In April 1994, 150 people came to a meeting and 9 worksites were chosen. 119 volunteers signed up and the Volunteer Bush Regeneration Program was created.

The Friends sought assistance and advice from the Australian Association of Bush Regenerators and the Foundation for National Parks & Wildlife (FNPW), an independent organisation supporting national parks).

AABR facilitated 20 trained bush regenerators to initially supervise and train small groups of unskilled volunteers. FNPW was able to attract donations, which provided \$330 000 to allow the employment of two experienced regenerators as Bush

Regeneration Coordinators for a 3-year period. During these 30 years National Parks and Wildlife have employed their own team of bush regenerators and kept the co-ordinator role.

This program is still going strong. Records show that in 2021 there are still 27 groups listed and that 205 volunteers completed 7,826 hours of work in the first half year

COVID restricted the ability for the Friends to hold celebrations to commemorate 30 years of volunteering in the park. However Friends, Mike Pickles and David Meggitt, compiled a booklet on the achievements of the volunteers - *Thirty Years of Caring: Volunteer Bushcare in Lane Cove National Park*. View online as a flipbook at [Thirty Years of Caring_Friends of LCNP_v2.0 \(fliphtml5.com\)](https://www.thirtyyearsofcaring.com.au) or download as a pdf at <https://www.friendsoflanecovenp.org/publications>

The booklet includes a short history of some aspects of the northern Sydney bushcare movement. It chronicles the activities and people both from the Friends and the NPWS staff. Detail on each of the 27 Bushcare sites that are still functioning are given. The many awards that both the program and individuals have received are documented

To access the booklet and other publications from the Friends of Lane Cove National Park (including an article in *Ecological Management & Restoration* Vol 6 No 2 August 2005, visit <https://www.friendsoflanecovenp.org/publications>



Banksia Bush Care: The Regeneration of a Littoral Rainforest

Kieran Tapsell

Stanwell Park is a village on the NSW coast just south of the Royal National Park. The Banksia Bush Care group working in one of the reserves has had to deal with weed invasion and deer which were degrading the bushland.

The ecological history of the Stanwell Avenue Reserve is fascinating. The early photos of the area in the 1880s shows that it was littoral rainforest. This vegetation community is now listed nationally as *critically endangered* under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and as an endangered ecological community under the *NSW Biodiversity Conservation Act 2016*.

In the 1920s, the area was denuded of almost every tree when it was subdivided for housing. Only four houses were built on the area by 1968, and the forest was gradually allowed to regenerate in some areas. In that year, the New South Wales Government resumed all the land which had not been built on, for the purposes of a park, and since then, one house was sold to the Council and demolished to add to the Reserve.

To the west of the kiosk, a mixed forest of banksias, wattles, eucalypts and rainforest species started to grow, but they were heavily invaded with lantana, senna, cassia, and later with *Ochna serrulata* and asparagus fern, which effectively suffocated most natural regeneration of native species.

In the wetter area of the reserve, to the south east of the kiosk, rainforest tree species started to regenerate together with less invasion of lantana as it requires more sunlight. Over the next 50 years, volunteers and Wollongong Council rangers have attempted to control these invasive weeds, and in the last 20 years, they have been removed except for some small pockets.



Above: The reserve 1977 and 2018

Deer Control

Invasive plants were not the only enemy of the rainforest. As the invasive weeds were removed the existing trees were threatened by Rusa deer, first introduced into the Royal National Park in 1906, and whose populations have now reached plague proportions, and now spread as far south as Ulladulla. Deer kill

the native vegetation by eating young trees as they sprout and ringbarking adult trees by rubbing their antlers on the trunks. Rainforest species are particularly prone to death by Rusa. A survey we carried out in 2019 showed that in just half of this 4.5 hectare reserve, 1778 rainforest trees had been partially or totally ringbarked by deer. Many of those partially ringbarked have since died.

In 2018, we had approached Wollongong Council about building a deer fence in the hind dune rainforest area that was starting to look like a cattle yard through the activities of as many as 10 buck deer living there.

In July 2019, to protect the existing trees and the emerging rainforest, the Banksia Bush Care volunteers erected a 3,000 square metre deer fence to the south east of the kiosk around the most vulnerable sections of the rainforest. We completed the fence with mesh, wire and star pickets provided by Council.

No deer have so far managed to jump the fence and the difference between inside and outside the fence is significant. We were able to see which seedling trees were eaten by the deer by comparing the vegetation inside and outside the fence. Trees such as *Alphitonia excelsa*, *Claoxylon australe*, *Clerodendron tomentosum* and *Glochidion ferdinandi* started to come up within the deer fence but were absent or chewed outside the fence. The effect of this fencing has been extraordinary in allowing not only the rainforest trees to regenerate, but also native grasses and ground covers to grow. Trees which had been eaten, such as the *Banksia integrifolia* and the *Glochidion ferdinandi* have been able to grow without being hedged and mangled by deer. New grasses regenerating, included *Microlaena* and basket grass. We still have some weed species, such as *Ehrharta erecta* but that is likely to decline.

We have recently created a 100 square metre copse surrounded by mesh fencing to the west of the Stanwell Avenue to Kiosk track within the turpentine forest. The reason for this was we had noticed a proliferation of some 20 different species starting to sprout, once the invasive species, mostly lantana and ochna, had been removed.

These species are: two veined hickory *Acacia binervata*, black plum *Diosporos australis*, brittle weed *Claoxylon australe*, white aspen *Acronychia longifolia*, Yellow pittosporum *Pittosporum revolutum*, sweet pittosporum *Pittosporum undulatum*, orange thorn *Pittosporum multiflorum*, cabbage tree palm *Livistona australis*, bangalow palm *Archontophoenix cunninghamiana*, lilli pilli *Acmena smithii*, red fruited olive plum *Elaeodendron australe*, mutton wood *Myrsine variabilis*, unscented rosewood *Synoum glandulosum*, breynia *Breynia oblongifolia*, celery wood *Polyscias elegans*, large leaved mock olive *Notelaea venosa*, native bleeding heart *Homalanthus populifolius*, native peach *Trema tomentosa*, guioa *Guioa semiglaucula* and murrogon *Cryptocaria microneural*. All these trees are found naturally in other parts of the forest and the seed has probably been lying there for some time waiting for the invasive weeds to be removed. Many of these species would almost certainly have been killed by deer if they were not protected by a fence.

Outside the deer fence, we have tried various methods of protecting the existing trees, the cheapest being wrapping sticks around the trunks with cable ties, and the more expensive



Deer Fencing; Left - after completion in July 2019 . Right - in November 2021 showing regeneration which has occurred.

wrapping the trunks with flower wire. The stick wrapping is only a temporary solution as we have found that after about a year, the sticks become more brittle and the deer can break them off and continue rubbing on the trunk. The flower wire is the most effective, but it has to be monitored to make sure that it does not get too tight as the trunk expands. The flower wire, however, is ineffective when the tree trunk is 10 mm or less, because the deer have been known to snap the tree off even with the wire around it. The only solution for these trees is a 2 metre mesh cage held by two star posts of the kind we have been installing.

Fire

Invasive weeds in the reserve are under control. Rusa deer are not, but protective measures are being taken. The biggest danger to critically endangered littoral rainforest, is bushfire. This particular rainforest is vulnerable because the western half of the reserve is eucalypt forest (mainly *Eucalyptus pilularis*, *E.botryoides* and *E.paniculata*) with emerging rainforest species growing underneath. Spot fires from a fire on the top of the escarpment, fanned by hot north west winds, could take hold in the reserve if there is enough fuel on the ground.

Nothing can be done about the fire conditions and slope, but something can be done about the fuel. The nests (see description below) have been shown to burn more slowly and with less intensity than an equivalent quantity of sticks left in a pile, because of the effect on air intake through basket weaving the sticks into the nests and the retention of moisture. The top 5 cms



Building 'nests' with weed material.

of the leaf litter compost is the only part of the centre to burn because the rest of it is permanently wet and composting.

We have used accumulated leaf litter to replenish the centres of the nests which are constantly dropping in height due to composting, and eucalypt sticks, which are then broken up and woven into the existing nests. We use a McLeod tool to rake up excess leaf litter, as used lightly, we can rake up leaf litter without damaging emerging trees, understorey and grasses.

Community involvement and Art in the Park

In 2017, after Wollongong Council asked us to leave the weed material on site, and after seeing Gaby Porter's sculpture garden at Wombarra we copied her idea of making a giant bower and a giant nest with the fallen sticks on her property. I first made a giant bower with the weed material and then some giant nests, and a porcelain male and female bower bird and then painted eggs.

This evolved and became Art in the Park after some parents asked if their children could paint eggs too. Other residents and children from the Child Care Centre joined in.

Art in the Park created an opportunity in a bush setting to educate people about art, particularly the younger members of the community. This plus the bush care work also provided us with an opportunity to educate everyone about the littoral rainforest. We have also put tree identification labels on trees along the walking tracks.

The Guide

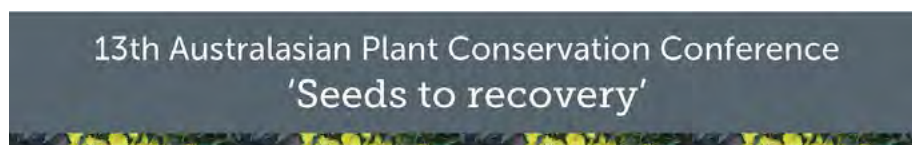
For those who may be interested in more detail on the ecological history of the forest and the species currently growing there, we have created a Guide which is available free of charge. Read an article on the site and download the guide at <https://www.theillawarraflame.com.au/discover-a-bush-art-gallery>

The Guide contains a short Aboriginal and colonial history of the area, the 1880s and subsequent photos, including aerial maps from 1948 onwards. There is a species map as well as descriptions and photos of the many individual species that have regenerated since the 1930s.

Anyone who would like to give us a hand and learn more about this forest can contact me on kierant@ozemail.com.au .

Photos: Keiran Tapsell

Australasian Plant Conservation Conference (APCC13) in April 2022



The Australian Network for Plant Conservation and Albury City are proud host the 13th Australasian Plant Conservation Conference in Albury from 3 to 7 April 2022.

The conference theme 'Seeds to Recovery' covers topics such as recovery of native plants and habitats after fire, native seed supply, conservation of threatened species and communities, and engaging people in conservation and restoration.

Presentations and workshops will allow ample opportunity to discuss conference themes, complemented by a social program and field trips that will highlight Albury and surrounds. For information go to <https://www.anpc.asn.au/conferences/apcc13/>

Abstract submissions are now open via the conference website.

Stay up to date with all the conference news via the general monthly e-newsletter from ANPC: <https://www.anpc.asn.au/anpc-news/>



New Plant Germplasm Conservation Guidelines

The third edition of *Plant Germplasm Conservation in Australia: strategies and guidelines for developing, managing and utilising ex situ collections in Australia* has been released.

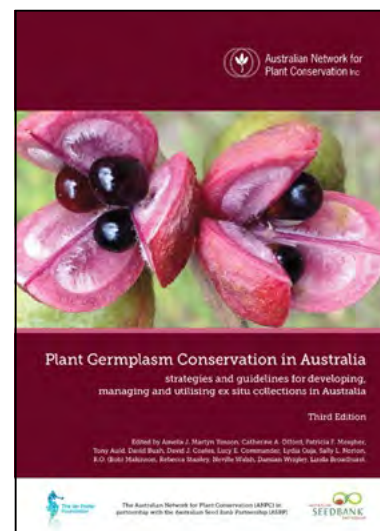
These 'Germplasm Guidelines' focus on seed and plant collections held away from the natural habitat (*ex situ*) in seed banks, botanic gardens, and other institutions throughout Australia.

The Germplasm Guidelines are now available for free download: <https://www.anpc.asn.au/plant-germplasm/>

They will be particularly useful for bush regenerators working on seed collection, germination or regeneration of threatened species or translocation projects, either in community organisations or in partnership with local council or state or federal conservation agencies. Nursery staff, students, volunteers, and anyone interested in applied plant biology will find something valuable and new to learn, with 50 case studies highlighting plant conservation in action.

The third edition includes updated information on collection of seed and vegetative material, germination and dormancy, propagation and nursery techniques, and conservation of plants with special growing requirements such as orchids, ferns and carnivorous plants. The latest evidence-based information is summarised in an easy-to-read format, with hundreds of photos, helpful information boxes and infographics.

The Australian Network for Plant Conservation and the Australian Seed Bank Partnership joined forces with the restoration and agriculture sectors, botanic gardens, CSIRO and universities to produce the publication, which was generously funded by The Ian Potter Foundation. Videos to complement the Guidelines can be accessed on the ANPC YouTube channel, searching for the playlist *Plant Germplasm Conservation in Australia*. <https://www.youtube.com/c/AnpcAsnAu/playlists>



Toni McKay and how AABR was named

In November 2021, a joyous day was held in Artarmon Reserve, Sydney at the dedication of a seat to Toni McKay (who passed away in 2018) with many of the regenerators involved in setting up AABR.

AABR was intended to become the professional body for bush regenerators and the name the Australian Association of Bush Regenerators (rather than Bush Regeneration) was chosen deliberately with Toni being a strong advocate that AABR was to be about the bush regenerators themselves and how they were being paid and treated.



Vale Pat Pike

Pat was a high school science teacher for 30 years up to 1988. While teaching biology at Pennant Hills High School in northern Sydney, she became interested and learnt about bush regeneration and started organising work in the remnant vegetation within the school grounds.

After completing the Bushland Regeneration Certificate (with Distinction) at TAFE, she taught at Ryde TAFE from 1992 to 2003 and was involved in much of their plant related field work.

Pat worked as a bush regenerator at a range of sites and joined Hornsby Shire Council's Bushcare Programme when it started in 1989, where she was a trainer and supervisor of volunteers until 2003.



Above: Pat on the left with Jenny Lewis and Barry Lees - members of the Hornsby Herbarium Group above their beloved Berowra Valley Regional Park, northern Sydney.

In 1995, she volunteered to identify plants along defined transects across creeks as part of investigations done by the Berowra Catchment Management Committee, following algal blooms in the Berowra Creek.

From 1995, Pat was one of the Friends of the Berowra Valley Regional Park who produced *A Guide to the Berowra Valley Regional Park*, published in 2001. She did many of the plant descriptions and pictures.

In 1998, Pat joined the Hornsby Herbarium group. This group developed a herbarium of pressed local plants kept at Hornsby Library, subsequently transferring to an online herbarium hosted by Hornsby Council.

Pat received an AABR award in 2016 for Outstanding Contribution To Bush Regeneration. (See Newsletter #30) and in 2015 was given Life Membership of the Australian Plants Society NSW for her contribution to the body of knowledge of native flora.

Pat died on the 22nd October in Sydney following a long illness. The cover photograph for *A Guide to the Berowra Valley Regional Park* was taken by Pat at Barnett's Lookout, Berowra Heights, where her ashes were scattered.

Hornsby Herbarium

Pat Pike was a member of the Hornsby Herbarium Group which put together the Hornsby Herbarium. This can be found online at <http://www.photosau.com/hornsbyherbarium/scripts/home.asp>.

The online herbarium catalogues hundreds of native plants (& some weeds). Although for species found in the Hornsby Shire, these will be species commonly found in the bushland of Sydney and surrounds.

Vale Julian Lymburner

from Stephanie Lymburner

In 1992 Julian and I moved from Sydney to the NSW far north coast to a property belonging to my family. The property was a steep rocky east facing slope with camphor laurels, guioa, hoop pines and other native species invaded by lantana, presenting significant problems. Also, three waterfalls were being choked by mist flower and crofton disrupting the water flow.

We realised that training was paramount and enrolled in the Bush Regeneration course in 1994. On completion of the year long course we commenced at the southern end of the property and worked northward along the steep slope. After controlling the weeds and employing a stone mason to create walking paths, the property shows what hard work can achieve.

In 1997 we placed a Voluntary Conservation Agreement with the NSW Minister for the Environment over the native vegetation on the property, to protect the species diversity, outstanding rock formations and waterfalls.

We joined the Big Scrub Landcare group at its inception in 1994 and served in various roles over the next twenty years - primarily as bush regenerators on Big Scrub remnants such as Brockley, Davis Scrub, Dalwood and Lumley Park. Other worksites included Iluka Nature Reserve, privately owned areas and council reserves.

From 2013 to 2017, Julian headed a team of 10 volunteer regenerators working on Fraser Island - K'gari which was both challenging and rewarding.

Julian was an industrious and meticulous worker looking after the well-being of his team. He had a delightful sense of humour, enjoyed hearing and making puns. His patience, gentleness and peaceful nature will be sorely missed by the regen community. Julian was named a Pioneer Regenerator by AABR in 2016.

Julian passed away on 20th September 2021 after battling a variety of medical conditions over eighteen months.

Stephanie, son Leo, members of the local regen community and other friends will gather in the New Year to scatter his ashes in



one of the waterfalls and surrounding area assuring Jules will be in a place he loved and nurtured.

Above: Julian and Stephanie

Left: One of the beautiful waterfalls on their property near Ballina in northern NSW.

Photos supplies by Stephanie Lymburner

What's happening

Tuesday 15th to Thursday 7th March 2022

The 2022 NSW Landcare and Local Land Services Conference Rethink, Renew, Recharge



Local Land
Services



The three-day event will take place at Twin Towns in Tweed Heads.

The conference will feature expert speakers and testimonies of Landcarers from around the state who will challenge delegates to rethink how they can best care for land and waterways

There will be chances for those at the conference to renew their efforts by tapping into the latest research and learning new skills in areas such as community resilience, natural resource management, sustainable agriculture, and carbon farming.

On top of all this, the conference will also include the NSW Landcare awards.

For more information: <https://nswlandcareconference.com.au/>

**Monday 21st to
Thursday 24th March
2022**

NSW and VIC Combined Weed Conference

Discover Through Recovery

Albury Entertainment Centre

* Registrations are open

More information, go to:

<https://www.nswweedsconf.org.au>



**Thursday 17th May
2022**



NSW Roadside Environment
Committee Forum

Can Do Corridors

Highlighting Good Practices in Linear Reserve
Environmental Management

NSW Teachers Federation Conference
Centre, Surry Hills Sydney.

Expressions of interest open for presenters
to 4 February 2022

Contact Neil Dufty - Executive Officer
nduffy@molinstewart.com.au

**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.

Note that abstract submissions will re-open in January 2022 - closing 14 February 2022.

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



Australian Association
of Bush Regenerators
Working with natural processes

President

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Treasurer and Administration

Suzanne Pritchard admin@aabr.org.au

Secretary

Jane Gye secretary@aabr.org.au

Committee members

Scott Meier, Matthew Pearson, Agata Mitchell, Rob Scott, Deb Holloman, Victoria Bakker, Alex Milicic and Tein McDonald

Membership Officer

Louise Brodie membership@aabr.org.au

Website advertising

Mitra Gusheh advertise@aabr.org.au

Victorian Branch

Enquiries please contact Rob at rob.scott@naturelinks.com.au or phone 0412 865 027

Australian Association of Bush Regenerators

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 officers—and 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