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working with natural processes

AABR Events in NSW

Register now



Grass ID for Bush Regenerators

Two chances to attend our ever popular workshops.

These are being held at Kariong Neighbourhood Centre (near Gosford on the NSW Central Coast)

Monday 20th February 2023: 9.30am to 1.30 pm

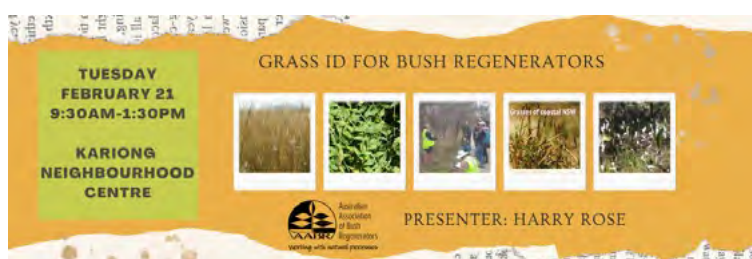
Information and Registration:

<https://hub.givar.com/campaigns/grass-id-for-bush-regenerators-with-harry-rose-monday-20-february>

Tuesday 21st February 2023: 9.30am to 1.30 pm

Information and Registration:

<https://www.givar.com/campaigns/grass-id-for-bush-regenerators-with-harry-rose-tuesday-21-february>



This AABR-supported event is rescheduled to March 2023
(after postponements/cancellations in 2022 due to floods and COVID).

Be quick to book

Site Visit

**Lane Cove National
Park,**

Chatswood, Sydney

Saturday 25th March 2023

1-3 pm

Looking after Lane Cove
NP for the long term

Find out more and
register

<https://www.aabr.org.au/event/looking-after-lane-cove-national-park-for-the-long-term-with-community/>

President's Perspective

Happy New Year to you all. I hope that you are feeling recharged after a bit of a summer break and ready to head out and pummel those weeds that took advantage of your absence and the warm weather! Personally, I have a patch of lantana on my farm that I am eying off for imminent destruction.

A lot has happened in the biodiversity world since the last newsletter. COP 15 was held in December, resulting in agreement on a suite of ambitious targets and goals, many of which are of direct relevance to the restoration community. These include goals for 30% of degraded terrestrial, aquatic and marine ecosystems to be under effective restoration by 2030; for 30% of lands and waters to be under effective conservation by 2030; halting species extinction; effective management of pest and alien species; increased connectivity of ecosystems and access by urban populations to quality nature. The full list of goals and targets can be found at <https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022>.

While it is encouraging that once again there is very public recognition of the dire straits that the world's biodiversity is in and strong commitments from governments around the world to do something about the issues, we know from past commitments, both international and domestic, that little is done, that which is done is often not done well, and we continue to lose species and ecosystems.

While it was heartening to hear fairly positive rhetoric from the Australian delegation and the Environment Minister. Tanya Plibersek, my fear is that we will see little progress, as has been the case with previous Australian commitments on biodiversity and climate. The Minister has announced that Australia will move from being Nature Negative, to Nature Positive, though there is little detail what this means. Australia has agreed to meet the 30 X 30 target (30 % of land and sea under conservation protection and management), but little has come out in regards to most of the targets and goals, and the main four mechanisms announced to become "Nature Positive" are the reform of environmental law, meeting Australia's climate targets, the formation of an Environmental Protection Agency and the development of a

market mechanism for biodiversity management. From the information available, none of these are guaranteed to result in positive change and all present risks to biodiversity that need to be addressed in their design.

Most telling is that there is no new money for ecological and environmental restoration and an effective reduction in existing funding. Funding to some programs is to be globally the same but allocated over five years, rather than four, Australian Government agencies continue to fund core business out of the Natural Heritage Trust, rather than these funds being spent on their original purpose, environment and natural resource agencies are rumoured to be getting budget cuts.

To really become "Nature Positive" we do need the institutional, regulatory, legislative and economic changes that stop degradation and remove perverse subsidies, but our ecosystems are so compromised, we also need significant and consistent funding over decades to slow then reverse the damage done.

We cannot afford for the government to meet its targets through accounting tricks, as the previous government tried to do with climate. We need meaningful changes and investment and robust monitoring and auditing. We need the government to stop funding poor quality environmental restoration over ridiculously short timeframes. We need honest, open, transparent conversations and actions to understand the problems and their solutions.

Bush Regeneration Song Competition

Tein McDonald has proposed a fantastic idea. Over this year we will run a competition for the best original and adapted bush regeneration songs. Adapted songs are those where you change the lyrics and title (e.g., "Spraying Alive").

Keep an eye out on the AABR e-news, website and social media for details of how to enter (yes, this means that we haven't worked it out yet).

Peter Dixon

President AABR

Welcome to new AABR Members

Ana Cecilia Goncalves	Liza McGuigan
Andrew Yager	Maggie Aitken
Betsy Hussin	Matt Consterdine
Christina Stanley	Matthew Whitelock
Dan Walker	Michele Guerin
David Jones	Noah Shaberman
Erick Jager	Peter Wear
Felicity Sturgiss	Shane Fewtrell
Graeme Batterbury	Violet Lamey
Jarrad Jones	Wendy Royston
Jason Lubke	
Julien Pearce	Not for Profit
Kingsley Osazuwa	BirdLife Australia
Linda Daley	

Business

Treerific Solutions

Congratulations on Accreditation

Samuel Dawson	Mark Adams
Alex Moodie	Lachlan Hough
Tony Bracey	Adam Dacey

"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 AGM - your new board

The AABR AGM was held on-line on the 5th November 2022.

The **National AABR Board** was elected, being:

- **President:** Peter Dixon (NSW Mid North Coast)
- **Secretary:** Jane Gye (NSW Sydney)
- **Treasurer:** Matthew Pearson (South Australia)
- **Board members:**
Tein McDonald (NSW Snowy Mountains), Scott Meier (NSW Mid North Coast), Agata Mitchell (NSW Sydney), Rob Scott (Victoria), Mark Cachia (Queensland), Chloe Mason (NSW Sydney) and Andrew Scott (NSW Sydney).

AABR's achievements presented as part of the Annual Report are on page 14 of this newsletter.

For the full Annual Report go to https://drive.google.com/file/d/1qliwzzHk2G5NdLKeGEUgUCj-vOu_Poia/view

To read more about your board members, committee members and project officers go to <https://www.aabr.org.au/about-aabr/aabr-committee-members/>.

Hosting a Walk and Talk

The successful implementation of the Walks & Talks Working Group last year has increased AABR's capacity to support sharing your restoration project.

AABR would really like to see some offerings from outside of the Sydney area. AABR is a national organisation and our members are everywhere, so are their projects.

Do you need to promote your project outcomes? Would you like to share your tips and techniques with other bush regenerators? How about a write up in the AABR newsletter? Is there a funding agency that you need to recognise?

When you host a Walk & Talk these are some of the benefits you receive, as well as contributing to the **United Nations Decade on Ecosystem Restoration**.

AABR can offer promotion via our newsletter, website and social media channels as well as coordinate bookings. We can also support the writing of a case study for the newsletter.

If you've got a project to share, we'd like to assist and support you in that endeavour, and include it in our 2023 calendar.

Contact education@aabr.org.au and the talks about the walks will get underway.



Who can we talk to?

In 2023 AABR will be reaching out to Local Government to share our resources and opportunities that can assist these major land managers in caring for their bushland assets.

But who do we contact to share the wonders of AABR with? Historically the 'council@XXXX' email address has rarely produced a response.

We know many of our members have regular dealings with councils or work with a council, and we are seeking your support to get in touch with them. We want to send one message to them as a way of introducing ourselves and what we can offer to support them to care for their bushland by harnessing the mighty power of assisted natural regeneration.

Here's a link to a form to help collect the information we need <https://forms.gle/uk4MABmCF4u2R7jR9>.



AABR VIC Branch AGM

The AGM of the Victorian Branch was held on Thursday 24th November 2022.

The committee election result was as follows:

Chair: Rob Scott

Secretary: Alex Milicic

Committee members: Steve Llewellyn, Craig McGrath, Kylie Robertson, Joab Wilson, Sharon Mason, Dan Walker

Associate members: - Max Campbell - FNCV, Matt Hall - ECA Vic

The **Chairs Report** from Rob Scott covered the activities over the past year :

- accreditation of 6 members
- induction of 6 Accreditation Assessors
- bimonthly meetings – well attended
- 2 online forums with Ecological Consultants Association of Victoria (ECA)-Vic
- core units recommended for Swinburne's CEM traineeship
- developing reconstruction guidelines
- chemicals in the Management of Biodiveristy (CIMB) Working Group developing information sheets
- co-ordinating and action-packed calendar for 2023.

The full Chair's report which includes the plans for 2023, can be found at <https://drive.google.com/file/d/1FzBUOv2BD-Vd6jaESMfG878gWEGKxkqu/view>.

Restoring the Cumberland Plain in north western Sydney – AABR Walk and Talk

**Xuela Sledge, Project Manager,
Cumberland Plain Restoration Program – Greater Sydney Landcare**

Greater Sydney Landcare and NSW National Parks and Wildlife have teamed up with several other partners to coordinate the Cumberland Plain Restoration Program (CPRP). This is a *Saving our Species* program, with funding administered by the NSW Environmental Trust. Approximately \$350,000 will be fed into the restoration of seven sites across the Cumberland Plain, four on Park estate; two on Council land; and one on private land.

The Cumberland Plain, is a biogeographic region in NSW, which is a relatively flat region west of Sydney CBD and east of the Blue Mountains. Cumberland Plain Woodland is one of a number of plant communities found.

The CPRP also includes community engagement and awareness raising as an objective, and on September 24th 2022, AABR held, as one of its calendar events, a trip to one of the program's sites. The site is known as 'Sittella', after the bird, the varied sittella, which is known to frequent the site. The varied sittella is listed as a vulnerable species in NSW and inhabits much of mainland south east Australia – except the arid areas.

Work at the Sittella site - not just weed control

The Sittella site sits within Scheyville National Park, which is the largest remaining patch of Cumberland Plain Woodland left. Like the sittella, Cumberland Plain Woodland is also listed as threatened, specifically as an Endangered Ecological Community (NSW) and as Critically Endangered Ecological Community (Federal). Scheyville is located in the northwest of Sydney, towards Windsor, and is pronounced 'Sky-vill'.

Scheyville was once agricultural land, a site for immigrant camps after the Second World War, an officer training school during the Vietnam War, and a place for recreation until established as a National Park in 1996. Consequently, it has had a lot of disturbance and is lacking old growth trees. In light of this it has many weed problems, and one of those weeds is a native acting like a weed – *Bursaria spinosa* (blackthorn).

Blackthorn is a fantastic habitat shrub for small bird habitat, but in the absence of fire can dominate and close what is meant to be a 'woodland'. Cumberland Plain Woodland typically comprises an open tree canopy of older trees with open space in between them. This provides opportunities for woodland birds to go between the canopy and the ground for refuge and ample grassy ground covers, respectively. African olive and lantana also thrive in this environment, and behave similarly to blackthorn, compounding the closure of the woodland and limiting the diversity of the ground layer.

'Closing' a woodland environment has many implications, including limited native recruitment for native forbs and grasses, and a lack of passageway for herbivores who may otherwise promote the growth of these via browsing. As such, Sittella has been earmarked in the CPRP to have intervening methods of restoration to encourage a more open/woodland environment to return.



The Sittella Bushcare site

Photos: Xuela Sledge

Participants on the AABR walk and talk saw the site where different methodologies have been used – an attempted ecological burn, trittering, and weed control.

In late 2020 an ecological burn was attempted at Sittella. With the best attempts from NPWS, including a helicopter hosing fire from the sky onto site, but it did not burn. The bursaria would not catch alight, presumably due to the large amount of air underneath the shrub. In light of this, the site was subject to trittering in 2021, in order to clear away the blackthorn, and leave it on site as vegetation waste that may add to the fuel load to put a second ecological burn through.

A tritterer is a large 'forest mulcher' (see image below; note this is not a photo of the machinery used, rather similar only). It can clear thick shrubs and small trees without any trouble. It is hardly a piece of equipment one may think of to be included in the 'bush regeneration' field, but when dealing with large areas within National Park, it is sometimes needed.

Unfortunately, the destruction involved in the trittering process – which opened up the soil to light – encouraged lantana to return to a level not present prior to the trittering intervention.

This meant we had to then intervene with traditional weed control works of cutting and painting the lantana, which has been costly and requires follow up.



A tritterer similar to that used on the site

However, the battle is being won. Prior to the eco burn attempt which was the first stage of restoration in this program at Sittella, there were limited native grasses on site. Now native grasses are thriving, and the regeneration of native forbs is improving all the time. All of a sudden, we are in control of the weeds on site, and we have an active program to keep on top of the dominating weedy shrub layer – be it blackthorn or lantana.

The second aspect to returning this site to a woodland involved the thinning of the common eucalypt saplings. This is thought to make space and let light in to allow the larger trees on site to be able to grow out, as well as up, so that they mature into wider older trees that will become habitat sooner with hollow creation etc. With the competition in re-growth Cumberland Plain sites, there is little to no opportunity for hollow creation as the trees simply go up and not out.

Addition of habitat components

Although not at Sittella, nor Scheyville National Park, we have also intervened with the creation of habitat through the distribution of coarse woody debris. These are essentially large limbs and root masses that were stockpiled after clear felling a large ex-defence woodland remnant (for the suburbs of Jordan Springs and Ropes Crossing). Through the clever and efficient work of the Cumberland Area NSW National Parks and Wildlife Service (NPWS) approximately three hundred tonnes were moved around the nearby Wianamatta Regional Park.



Root masses - examples of coarse woody debris returned to Wianamatta RP.

Logs and large root masses as habitat may not have been on the Cumberland Plain before Europeans, as the traditional owners of the land kept it burnt and free of debris on the ground. During the time before Europeans arrived, the Cumberland Plain and the rest of the country had instead a plethora of old growth trees that were full of hollow, limb and bark habitats. Coarse woody debris substitutes these habitat structures which safely house reptiles, small mammals, birds and amphibians. Our re-growth trees are still too young to provide this habitat. Until the time when young trees grow up into older and elder ones, we must re-create the absent habitats that have disappeared with loss due to housing, agriculture and industry.

Weed control, thinning, habitat creation and education about the vegetation communities on the Cumberland Plain will go a long way towards recovering the native vegetation and the endemic western Sydney species of plants and animals that are still hanging in there. Some of these species can be seen in the bird species, which are monitored by Bushcare volunteers who also carry out bush regeneration at Sittella.

Community Involvement

Although unnamed at this time, a strong group of volunteers, often not the same each month, attend Birding and Bushcare at Sittella on the 4th Saturday of each month in the morning. The volunteers are guided through an early morning bird walk and talk, followed by a catered brunch, and a few hours of weeding. A bird list is being compiled through the guidance of bird expert Mark Fuller (from Avianation), at these B&B events. The objective of this is to determine whether a swing from a closed system to a more open woodland environment is encouraging back the woodland bird species.



Above: Here are some typical woodland bird species at Sittella, with photos by Avianation: From left to right Golden Whistler, White browed scrub wren and Yellow Thornbill.

The CPRP also currently takes a regular group of community volunteers spotlighting in the Jordan Springs side of Wianamatta Regional Park. This side of the reserve is still young and is recovering from past clearing. It has some larger older trees that follow the trend of African olive suffocating their base. Olive is a super weed (not superhero; but super strong) that has taken over many parts of the Cumberland Plain Woodland in southwest Sydney. We cannot afford to let this happen on the northern end of CPW as well. Otherwise, it could affect recovery.

We need many more hands - as the Landcare phrase goes - 'to make light work'. We have plans to try to develop a corporate volunteer bush regeneration program at the Sittella Bushcare site as it is flat, has easy access and is really easy in terms of weed control requirements. We could keep targeting lantana across the whole site, and then come back and start again with follow up. This could also bring in some funding, which could be put back into restoration on this - and other - sites on the Cumberland Plain and to continue the CPRP.

We also need the backing of decision makers everywhere. There still is endemic, native and 'wild' life left in western Sydney and it is well and truly worthy of recovery and to grow as a resilient and fecund community of life across many tenures.

If you have the opportunity, come and back Western Sydney's natural environment as a contrast to the abundant (and no less beautiful) greener suburbs in Sydney's north, south and east. Travel west for a day and pick up a tool belt with us. We can offer you a birding morning - or an evening of frog calls and mammal watching - plus an opportunity to get your hands dirty!



The Cumberland Plain Restoration Program is a Saving our Species project that has support from the NSW State Government through the Environmental Trust.

For more information on the project and how you can help go to <https://greatersydneylandcare.org/landcare-sos-cumberland-plain-restoration-program/>

Contact the Landcare SOS Project Officer for the CPRP xuela.sledge@greatersydneylandcare.org.

Demystifying reference ecosystems for bush regenerators - how their use is critical to best practice regen

**Dr. Andy Baker, Forest Research Centre,
Southern Cross University and Principal
Consultant of Wildsite Ecological Services**

This presentation will outline what a reference ecosystem is, and the key components of reference ecosystems. It is a broad overview to help get bush regenerators started. However, there are many complex issues (ecotones, climate change and more) which will not be covered here.

For planting projects, the need to use a reference ecosystem is obvious. With assisted regeneration, we often assume that after weed removal, the ecosystem is as it should be. However, unless we know how the site looked before degradation, it is hard to recognise if the ecosystem has changed in other ways apart from weed invasion. If we don't recognise (and restore) all aspects of ecosystem decline, we may fail to fully restore habitat for target threatened species, or may even accelerate habitat decline and loss.

The use of a reference ecosystem is the first of six restoration principles of the **National Standards for the practice of restoration in Australia**. These standards define a reference ecosystem as a "a real or notional community that acts as a model or benchmark for restoration". The reference ecosystem will clearly identify how the ecosystem looked and functioned before degradation. This benchmark will provide a restoration target to reverse declines.

Under the National Standards, a 'restoration' project should aim for the full recovery of ecosystem attributes. While projects which aim to partly restore attributes should be called "rehabilitation".

How reference ecosystems are used in practice

An example (upper picture right) is a degraded floodplain forest red gum-swamp turpentine forest heavily invaded with camphor and privet.

The reference ecosystem identified for this site (lower picture), has the same forest type/soil type/landscape position, but it has never been cleared, grazed, or invaded by weeds, and fire frequency remains unaltered.

Comparing the attributes between degraded and reference states we can see the extent to which the degraded ecosystem has changed from the reference conditions. In this case canopy cover has doubled, the dense ground cover has almost been eliminated, and it is long-overdue for fire. Thus the reference ecosystem provides measurable targets for the restoration of the degraded site.

Key components.

There are three key components of reference ecosystems which should be described – composition, structure, and ecosystem function. It is also important to describe successional states, following disturbance, and their effect on composition and structure.

Composition - define what are the typical species and in what proportions. A species list for the reference ecosystem and the species abundance helps identify species that are missing or sparse, atypical or overabundant. As a minimum, restoration should focus on a key aspects such as key habitat species (e.g. koala feed trees), and functionally important species (e.g. grasses/sedges in dry sclerophyll forest are often overlooked, but they provide key fauna habitat, erosion control, ability to carry regular fire in mild conditions – so recover post fire).

Ecosystem structure – identify the vertical structure (i.e. how many strata and comprised of which life forms). For example, a *Lepironia* sedgeland is characterised by a single ground layer of sedges, so if your site has emerging paperbarks, you may have an issue. A grassy dry sclerophyll forest has a ground layer of grasses, a midstorey of grass trees and a single tree layer.

Horizontal structure – measured as crown cover % and stem density



The image right, shows a rainforest on the left which has around 90% crown cover and high stem density, while the dry sclerophyll open forest on the right has around 50% crown cover and widely spaced trees. The rainforest ground layer has very sparse seedlings, while the grassy open forest has almost 100% ground layer cover.

Ecosystem function. While there are many functions/processes (pollination, nutrient cycling, macropod grazing), natural disturbance regimes are key ecosystem functions and are often the reason why different ecosystems occur where they do. Altered disturbance regimes lead to altered structure/composition and ultimately altered ecosystems and loss of habitat.

Some key examples include: Eucalypt forests characterised by *periodic fire*; wetlands experience both *periodic floods and fire*; rainforests rely on *no or rare fires*.

Successional states following disturbance must be considered as most importantly, structure and composition change with time since disturbance. This range must be described. For example, with increased time since fire, 'midstorey cover increases'. Also, early successional species appear in the first few years after fire and late successional species come later.

Any successional thresholds beyond which the ecosystem declines must be identified and documented. For example, midstorey cover can become so dense that it eliminates the ground layer community.

Practical examples of where reference ecosystems were or were not used.

Reference ecosystem not used. In this example a reference ecosystem was not used, and restoration involved exotic weed removal only. This forest red gum, swamp box forest was heavily invaded with camphor and privet. The reference ecosystem that we use for comparison here, is an old growth forest in



declared wilderness, where fire frequency remains unaltered. Key reference features are, an open tree canopy, a dense ground layer of shade-intolerant graminoids, ferns and heathy shrubs and fire about every 8-15 years. Whilst restoration removed the weeds, this triggered lots of regenerating rainforest trees. In contrast to our reference - the canopy remains closed and there is no ground layer. The problem - the lack of ground flora means most of the floristic diversity of this forest type is absent, there is



Ecosystem structural differences between rainforest (left) and dry sclerophyll open forest (right)

no dense habitat for threatened fauna such as Potoroos or Sedge Frogs and likelihood of future fires (a key function in this system) is diminishing. This project was aimed at restoring koala habitat. The restoration works should have returned the site towards reference conditions, but the works have actually resulted in the site being pushed further away from them. Concerns include: koala feed tree health and recruitment; without the ground layer the floristic diversity has not been restored, and neither has the key function of regular fire. Because a reference ecosystem wasn't used, the practitioners are probably unaware of these issues.

Reference ecosystem used. This example is grassy heathland (Clay heathland EEC) invaded by trees. The reference ecosystem has a single layer of heathland. With thinning and fire, the structure is restored and floristics are on their way. The ground cover is a bit sparse and diversity a bit low, but the reference ecosystem provides a benchmark.



Identifying Reference Ecosystems for Your Site

Step 1 Identify what was on your site historically (this is not always easy, as 100 or more years of degradation can have massive changes). One option is to use historical photographs and descriptions. This was very helpful in the restoration of the Byron Clay Heath EEC.

Another option if your site has changed dramatically, is to use indicator species. A photo of a reserve in North Sydney with old-growth *Banksia serrata*, indicated this forest once had a heathy understorey. In long-unburnt sites, look for shade-intolerant understorey indicators in well-lit edges and openings, which may have been shaded out from the core of the remnant.

Step 2 is to find a match for your site. In looking for a match, your reference ecosystem must have the same soil type, aspect and landscape position, and it must have an unaltered disturbance regime. For example when selecting a reference ecosystem, don't use sclerophyll forests with altered fire regime, or wetlands with altered hydrological regime or altered fire regime, and don't use rainforests that have burnt in recent decades. Where possible find a match locally. But you may have to look further afield to correctly match your site, or may have to rely on written ecosystem profiles if no existing reference ecosystem exists.

If you can't identify a detailed Reference Ecosystem, make sure you at least cover key aspects. Even identifying key attributes such as structure, functional composition and disturbance regimes are a major leap forward compared to not using a reference ecosystem at all.

For example, a useful *Dry Sclerophyll Forest Model* includes:

- Open-canopy (30-70% cover)
- Midstorey not shading out ground layer
- Dense ground layer (> 25% cover) shade-intolerant plants
- Function (7-30 year fire interval)

What about irreversible change?

Sometimes, key attributes can't be restored e.g., flooding/fire regimes in some suburban remnants. In these cases, it may be necessary to consciously modify the reference ecosystem. This requires an advanced approach and must be guided by skilled and experienced practitioners.

It is still important to identify an original reference ecosystem to maximise the number of attributes that can still be restored, and identify threatened species habitat that may decline as a consequence of any modification. Those sites that can't be fully restored should probably be considered a lower priority for restoration, compared to fully restorable sites.

Conclusion

- Identifying reference ecosystems is crucial in best practice bush regeneration – it helps us: understand how a site has declined; and to set targets for its restoration.
- The knowledge and skills required to identify reference ecosystems should be:
 - taught in Conservation and Ecosystem Management courses in the VET sector
 - (and arguably) should be part of AABR accreditation of bush regenerators.
- Both these things will place the restoration sector in a better position to serve the needs of ecosystem management and conservation.



Watch the video of Dr Andy Baker's presentation.

<https://youtu.be/8cDanbbnx-w>

AABR Victoria Webinar Program

Interpreting the National Restoration Standards for improving the reliability of local restoration projects.

This webinar was held on the 16th November 2022 – the second in a series of lunchtime webinars co-hosted by AABR Vic and The Ecological Consultants Association of Victoria (ECA)-Vic.

The notes below provide an overview of the webinar. Watch the video for more detail. It is online and can be watched on AABR's regenTV [website](#) and [YouTube channel](#). Presenters were **Tein McDonald** – a principal author of the National Restoration Standards, and **Lincoln Kern** – consultant and restoration designer.

A Summary of the Standards' principles and how tools can be applied locally

Tein McDonald

The Society for Ecological Restoration Australasia (SERA) collaborated with twelve partner NGOs in the writing of the *National Standards for the Practice of Ecological Restoration in Australia*. They were first published in 2016, with a couple of editions since then, and now up to Edition 2.2 (2021), which can be found at <https://www.seraustralasia.com/standards/home.html>

The Principles

The National Standards are based on 6 principles (paraphrased below). The first two are more complex, whilst the others are self-explanatory and generally understood.

Principle 1 Use a 'reference ecosystem'

Principle 2 Match inputs to level of resilience and degradation

Principle 3 Use clear targets, goals, and objectives

Principle 4 Aim for highest recovery level possible

Principle 5 Draw on the best science and practice

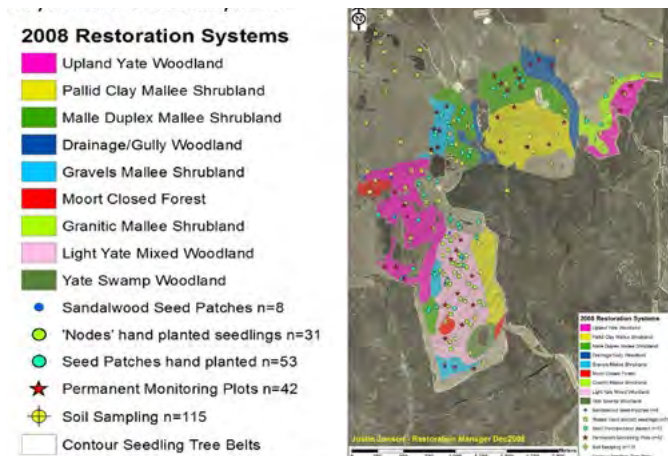
Principle 6 Link the social and the ecological.

Principle 1: A reference ecosystem. This helps the project manager to work out what is being aimed for. The reference ecosystem is not always easy to define, so there needs to be a degree of care taken. It is not simply a matter of identifying the prior ecosystem; any irreversible change including climate change also needs to be considered.

Reference ecosystems can be identified by using a number of attributes. In the Standards, 6 key attributes are listed being: physical conditions, species composition, community structure, ecosystem function, external exchanges, and absence of threats. These attributes help set goals and indicators of progress.

Principle 2: Match inputs with the level of degradation. There is a spectrum of approaches to site restoration. This moves from spontaneous regeneration on parts of a site with a high level of resilience, through facilitated natural regeneration where resilience is impaired and to reconstruction where resilience is absent.

The standards are adaptable to any size of project or degree of resourcing.



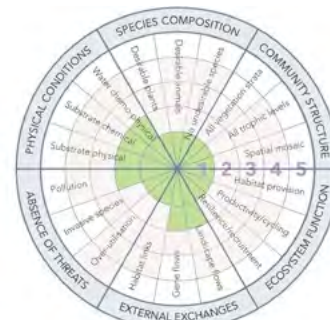
Using the Recovery Wheel

The example below shows the change in a the Gondwana Link Peniup site in WA over 6 years. This project started from scratch. The project manager entered the data into the Standard's online form to generate the recovery wheel.

BEFORE



BEFORE



AFTER
6 YEARS



What is your Reference Ecosystem?

ABOVE: An example of identifying a reference ecosystem is seen in part of the Gondwana Link restoration in WA. This Peniup site – designed by Justin Jonson - identified different reference ecosystems by recognising all the soil types in what had been a wheat cropping farm. The soil types were matched to soil types in local ecosystems, which in turn informed the species list.

The Recovery Wheel

Using the recovery wheel helps to communicate recovery over time. This uses the 6 attributes to see how the site is going compared to reference system. Note that the reference ecosystem smay be a model rather than an actual site.

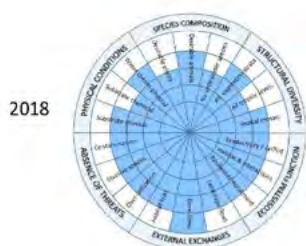
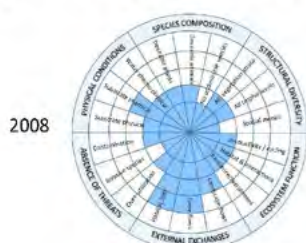
The guiding tables and blank tools for the Recovery Wheel can be downloaded from Appendix 5 of the *National Restoration Standards* <http://www.seraustralasia.com/standards/appendix5.html>.

There is an online tool in Excel format for filling in the information which will populate the colour on the recovery wheel.

Things to note when using the recovery wheel

- The 5-star system measures outcome not inputs
- The Wheel is only as reliable as the information that is entered. A degree of formality (rather than anecdotal) would be best, and it should be stated what degree of monitoring informed this.
- The wheel can be used with any monitoring system.
- The site may not start at a low condition, so it may be better to do a recovery wheel for each of the distinct zones on the site.

e.g. Numinbah – subtropical mixed forest, Gold Coast hinterland, Queensland – Jen Ford



LEFT: shows an example from Numinbah - a sub tropical mixed forest from the Gold Coast hinterland in Queensland.

The wheel shows the change after 10 years of work. Scores increased on all attributes and also external exchanges were increased on the site.

EMR project summaries

Numinbah: <https://site.emrprojectsummaries.org/2016/03/05/restoration-at-numinbah-conservation-area-city-of-the-gold-coast-queensland/>

Scottsdale: <https://site.emrprojectsummaries.org/2021/05/02/post-fire-assisted-regeneration-at-scottsdale-reserve-bredbo-nsw/>

At Scottsdale the standards were used to determine which attributes need most work.

Developing Local Restoration Design Guides

Lincoln Kern

The standards informed the La Trobe University Eco-Corridor Design Guide developed in 2017 and Yarra Riverkeeper's Middle Yarra Rewilding Design Guide written in 2021 to improve the reliability and quality of project design and implementation for local projects at any scale across Victoria.

I have been concerned with restoration project design so want to use the guidelines to improve this. Developing local restoration guidelines which introduce the Standards should help guide restoration projects.

'*Treeguard Dreaming*', a term coined by Darcy Duggan, and pictured below, can be interpreted as '*the guards are there, so there must be some habitat growing.*' Land managers such as councils may have a list of indigenous species for planting, but these are not necessarily of local provenance, and there are no reference ecosystems identified to indicate where these might be planted.



'Treeguard Dreaming'

The difference between gardening and restoration is not always understood. With gardening, humans replace plants, and humans replace mulch. Restoration creates a system which is self-regenerating.

Pictures with tree guards often mean there is little thought given to ascertaining the potential of restoration. Planting is not a problem approach

but is seen as the standard, and more complex restoration is not considered. We could do better and have better results. Did people look for native grasses or could native trees regenerate? What about the physical components of habitat? The planting phase is the smallest and easiest stage. Maintenance is more important. Will you get natural regeneration?

The Standards make sense of all the 'R' words, with 'restoration' being a good umbrella word.

La Trobe University Eco-Corridor Design Guide

In 2017, I was asked to do a Guide for La Trobe University who wanted a consistent design approach for their Eco-corridor which was a focus for the University. La Trobe had a history of looking after the environment with the creation of a wildlife reserve in the 1960's and stormwater wetlands in 1970's.

The objectives of the corridor included:

- Formally indicating conservation areas although significant areas of native vegetation occur elsewhere on campus.
- Developing a consistent approach to restoration.
- Providing guidance and resources to support high quality restoration.

As well as a consistent approach to the restoration of the corridor they want the resources to support this high quality restoration.

For the content of the Guide, we began with the geology and soil. We used the Standards Principles. The key to this guide was to provide the design resources for every project. This is the most difficult part – how to determine the reference ecosystem and what is the plant list. Someone with history and research should develop the reference ecosystem.

Comments on National Standards Principles

Principle 1. Reference ecosystems need to be identified. This is a model adopted to identify the particular ecosystem that is the target of the restoration project. This may be different to what was there before because of climate change or other factors.

Principle 2. Look at the potential for regeneration. The chart will help determine the approach. Naturally regenerating plants are always cheaper and will produce a healthier ecosystem. Look at the site to identify the areas with the different conditions.

Principle 3. Goals and objective are not always clear. The Standards remind us to be clearer about our targets - not about just achieving the requirement of the grants.

Principle 4. We would like full recovery, but we can have different levels of restoration which is acceptable, but we should be aware of it i.e., the restoration could be designed for 3 stars and higher...not only 5 stars, as minimum acceptable goals. (1-2 stars would be considered under the National Standards as starting points - rather than acceptable goal states for restoration).

Principle 5. Restoration science and practice are synergistic. In this case appropriate for this university campus.

Principle 6. Social aspects – for communities to accept restoration is good. Large communities are on board with tree planting but do not necessarily understand complexity of restoration.

The key issues for the La Trobe Guide were a complex geology so there were many ecosystems, and the Eco-corridor was based on the local waterway. Climate change was not taken into account as tools were not available at that stage. The Guide has a checklist, to remind designers of any project what they should be considering.

Yarra River Regeneration Guide

The structure of this report, published by the Yarra Riverkeeper Association, once again looked at the soils and geology, the National Standards Principles, and choosing and prioritising restoration.

One Case study was of an old planting on a dairy farm. This site now has greenhood orchids growing on the site. So, more recently, a further step was developed to continue restoration. Often, we need to use a step-by-step approach to enhance the goals.

Select sites according to priorities. Work by The Fenner School of Environment & Society at ANU found that on farms you can get more 'bang for the buck' by better connections and selection in the landscape.

The Guide results in designing quality restoration projects within a framework. It can include the step development of restoration sites and provision of other habitat elements. Also available are detailed monitoring systems to determine success. Hopefully, anyone can use this guide.

You can download the Guide at <https://yarrariver.org.au/reports/>.

Take home messages and ideas.

- Distinguish gardening/horticulture from restoration projects.
- The first two steps are identifying the reference ecosystem and determining resilience.
- Landscaping projects using indigenous species could often be ecological restoration projects if based on the Standards.
- Standards – to be adopted by consultants and land management authorities.

Restoration of Akaroa Quarry - Tasmania

- using a variety of methods

Todd Dudley

North East Bioregional Network

In 2016 the North East Bioregional Network (NEBN) objected to a proposed re opening of a quarry to extract granite for an extension to the St Helens Point barway rock wall.

The mine is located in the St Helens Point Conservation Area and surrounded by coastal bushland in good ecological condition including *Allocasuarina verticillata* forest, *Eucalyptus amygdalina* forest and *Melaleuca ericifolia* swamp forest. Strangely mining is a permitted use under the Conservation Area tenure in Tasmania despite it being managed by Parks and Wildlife. Very few Conservation Areas have Management Plans which is an indictment on the Tasmanian Government's priorities.

As with many coastal engineering projects the rock wall extension has been a black hole for millions of dollars of public money with minimal outcomes. Nevertheless, while the rock wall may have been a pointless exercise, NEBN were engaged in 2017 by Marine and Safety Tasmania (MAST) to rehabilitate the mine after the extraction was completed.

The mine site of around 1.5 ha, was relatively weed free. However it had been used by a local person to deposit their green waste so there was a small patch of weeds such as mignonette (*Reseda luteola*), *Melaleuca armillaris*, *Acacia retinodes* and Scotch thistle present.

Our methodology for restoring the Quarry was as follows:

- Removal of garden waste and soil (there was one soil heap that was left and managed in situ by spot spraying because it contained mignonette and we did not want to spread it elsewhere)
- Ripping the quarry floor and some gentle slopes with an excavator to improve conditions for native plant establishment
- Applying jute matting to slopes to ensure there is minimal soil erosion
- Establishing a small sediment trap/pond and place rock in drainage lines to protect from erosion
- Collection and dispersal of local native seed-bearing branches of *Allocasuarina verticillata*, *Allocasuarina littoralis*, *Melaleuca ericifolia*, *Banksia marginata*, *Kunzea ambigua*, and *Leptospermum scoparium*.

The *Allocasuarinas*, *Melaleuca* and *Leptospermum* always have viable seed capsules on them which open within days after the branches are cut while *Kunzea* and *Banksia* seed is only available in late Summer/Autumn. Unlike many other *Banksia*, the *Banksia marginata* in this region sheds just about all of its seed every year.

The ideal time for direct seeding is mid-Autumn while it is still warm, but evaporation rates are declining so this gives plants a chance to get established in moister conditions (it can be very dry on the East Coast of Tasmania)

The branches also help to some extent to protect seedlings from browsing by wallabies

We have used this process on a number of quarry sites with good success.

The outcome has been excellent with all species establishing. In particular the *Allocasuarina verticillata* is growing vigorously with many trees over 3 metres in height 4.5 years after seeding.

In addition, natural regeneration of other species occurred due to the close proximity to native bush. Some of the other recruits included *Acacia verticillata*, *Acacia sophorae*, *Monotoca elliptica*, *Olearia lirata*, *Kennedia prostrata*, *Correa reflexa*, *Pomaderris apetala* and *Muehlenbeckia gunnii* to name a few.

The sediment trap/pond has hosted a good population of tadpoles this year (2022) due to the wet weather.

There was one hiccup in 2021 when the Environment Protection Authority (EPA) visited the site to monitor the progress of the restoration. After the inspection, the EPA deemed that a small section of the access road was not doing as well as the rest of the regeneration. They contacted MAST and directed them to import topsoil to be deposited on the road and then to plant it out.

Fortunately, MAST contacted NEBN and we produced a short report which was sent to the EPA explaining why this was the worst of ideas and that it would have most likely introduced a cocktail of weeds to the site as well ruining the prospects for both direct seeding and natural regeneration. While NEBN and MAST considered the restoration of the road access was satisfactory we ended up re ripping and re seeding the road and also caged some of the subsequent regrowth to keep the EPA happy.

For more information about the work of NEBN
<https://www.nebn.org.au/>



Left: Akaroa Autumn 2017 prior to restoration.



Right: At the end of 2021 showing native vegetation reestablishing

Photos: Todd Dudley.

AABR is seeking to double the number of our Accreditation Assessors – is this a role for you?

AABR's highly valued Bush Regeneration Practitioner accreditation system (See <https://www.aabr.org.au/about-aabr/accreditation/>) is experiencing increasing demand at a time when many of our Assessors are reaching retirement age. Consequently, over the next year we are seeking to at least double our Assessor workforce in all regions in which AABR operates (mainly east coast Australia).

'Being an assessor is a great way to help AABR maintain high standards among bush regenerators' says Queensland regenerator Robyn Becket, who recently joined the Assessor team. 'I enjoy the role because it helps me maintain my own knowledge and exposes me to new ideas; and it's great to know that the standard is similar across the country as the process is all based on the 12 AABR competencies.'

The role of Assessor is an honorary one and the expectation is that each Assessor conducts at least two field-based Assessments per year in their region, as well as assist with the occasional phone or zoom assessment which apply in exceptional cases. Because we don't want to overload Assessors this means we need a fairly large team so that the effort can be shared around.

People wishing to be Assessors need a minimum of 2,500 hours bush regeneration field experience gained over 5 years - including a minimum of 500 hours in each of two vegetation communities (one of which has soil-seed banks). We seek applicants who have themselves been AABR-Accredited for at least 2 years – although we may invite exceptional applicants with a shorter period of Accreditation in new regions or where the need is very high (as long as they meet the other criteria). Assessors will also need excellent verbal and good written communication skills and have experience in preparing site management plans or work programs. A good understanding of underpinning ecological processes is essential.

Anyone interested in becoming an Assessor is invited to apply in writing (using an application form available on request) - or simply email or call me (Tein) or Suzanne to enquire about what is involved and how to take the next steps. New assessors can expect to go through an induction process and to act as an Assistant Assessor on two occasions before acting as a Principal Assessor.

Further enquiries (or for a copy of the application form) contact Tein McDonald Tel: 0458 565 654 Email: teinm@ozemail.com.au or Suzanne Pritchard Tel: 0407 002 921 Email: accreditation@aabr.org.au

Tein McDonald, Chair , AABR Accreditation sub-committee.

What is AABR Accreditation?

Since AABR's inception we have had a system of recognition of practitioners that hold the 12 AABR competencies of a bush regenerator – a system that is highly regarded in the industry. This standard was implicit in AABR membership until membership and accreditation were separated in 2012. As has always been the case applicants need at least 500 hours (ideally supervised) field experience gained over 2 years and including at least two vegetation types. Cert III in CEM/CLM delivered in a bush regeneration industry context is also highly desirable and a reliable stepping-stone to Accreditation. Accreditation is usually only awarded after a process of assessment (ideally in the field by two Assessors) that the Applicant indeed holds the 12 competencies. Exemption from full assessment is available in some cases, after a screening stage (and referee checks) show that the Applicant's course and supervisors are recognised by AABR as reliably providing high standard training and mentoring.

AABR Vic shows how to build an Assessor team in a new state

AABR sent two NSW members of the Accreditation sub-committee to Victoria in October 2022 to conduct an Accreditation Assessor Induction program in Victoria. Six new AABR Assessors participated in workshop sessions to familiarise themselves with the newly revised Assessor forms – and each participated as an Assistant Assessor in two field assessments.

The sub-committee mentors (Tein and Danny) found the process inspiring because of the many decades of experience of the new Assessors' and their enthusiasm to expand the Accreditation system into Victoria. 'We are really keen to see Accreditation start up here to provide a strong standard for the industry' said Kylie Robertson, one of the new Victorian Assessors. 'And it was great to see that our interpretation of what comprises good bush regeneration practice turned out to be strongly similar between the States. This was a bit surprising given that the restoration industries in Victoria and NSW have evolved separately but I guess the bush behaves similarly wherever you are.'

The new Assessors are currently finalising the reporting for their Assessments as part of the mentoring program, and we expect to have a fully fledged Victorian Assessor team in the near future.



Above: Tein McDonald at the Assessor workshop in Melbourne October 2022

AABR Vic and Accreditation

AABR Vic is very happy to say we are ready to commence Accreditation in Victoria with our very own Accreditation Assessors. Late last year, in between Covid disruptions, we had several Victorians obtain accreditation when Tein and Danny (from the Accreditation sub-committee) came to Melbourne for a weekend of assessments. In October this year (2022), Tein and Danny held an Assessor workshop over a weekend. Six accredited Victorians from a range of backgrounds attended this training and then conducted accreditation assessments as support and then Lead Assessors. It was a great process that we all enjoyed and got a lot out of.

Our next steps are to finalise the accreditations that we conducted and hopefully obtain some more assessors from this group. We are aiming at greatly increasing our pool of Accreditation Assessors in 2023 so we have the capacity to keep up with the growing interest and demand for AABR accreditation in Victoria. AABR Vic would like to thank Danny, Tein & Suzanne for all their hard work and support in making this happen.

Ecological Management and Restoration Journal - previous hardcopies free

Nancy Pallin would like to offer hard copies of *Ecological Management and Restoration Journal* to AABR members. These are Volume 1 to Volume 19, years 2000 to 2018 except for Volume 7. These would be interesting and inspiring for bush regenerators, specially if starting out, or wanting to learn more. A reader can quickly gain a sense of the wide range of people, ecologies, landscapes, problems and solutions covered in those years by leafing through the pages. The interviews with practitioners are so interesting, as they provide a window into people's lives, show their determination to tackle difficult issues and find novel solutions. Please contact Nancy Pallin via pallinnancy@gmail.com, who is willing to post them at her own expense.

Global network formed to promote the use of natural regeneration in ecological restoration

The international Society for Ecological Restoration (SER) has announced the formation of a new global network of members focusing on using natural regeneration in ecological restoration.

"This is an exciting and timely initiative" says Dr Tein McDonald, the inaugural chair of the new network called the SER- Natural Regeneration Network (SER-NRN). "Ecological restoration institutions worldwide have too long understated the importance of natural regeneration as part of the spectrum of approaches available to restoration practitioners. So this initiative will enable SER members to more conspicuously exchange ideas, technical knowhow and lessons learned – and will help disseminate educational information on the theme of regeneration." Members of the inaugural committee hail from four continents (Asia, Europe, North America and Australia) with three reps from Australia - so it is likely that lessons from a range

of countries will be highlighted by the group.

Plans are in place for a SER-NRN symposium and 'knowledge café' at the upcoming 2023 World Conference in Darwin 26-30 September 2023, and for a webinar introducing the Network in the first quarter of 2023. Members will be actively encouraged to contribute case studies and newsletter items.

Membership of WER-NRN is confined to SER members - but this should not be a barrier as membership options are available for those with a low income. To become a member, all interested people need to tick the (no charge) SER-Natural Regeneration Network (SER-NRN) box on SER's membership page or see instructions [here](#).

Abstracts for September's SER World Conference on Ecological Restoration in Darwin close on the 5th February – this is an important opportunity to share your regen stories in person or online. See <https://ser2023.org/program/call-for-abstracts/>.



Before and after satellite images of the former **managed natural regeneration** (FMNR) work taken in 2005 and 2017 in Humbo, Ethiopia. Project activities commenced in 2006.



With FMNR, community members actively manage their forest, undertaking regular pruning and thinning activities to encourage rapid growth of regenerating rootstocks of trees in overcleared lands. The regenerating forest provides not only environmental benefits but direct benefits to the villagers in the form of fuelwood, small poles and stakes, and fodder. (Photo Tony Rinaudo.)

Twenty-Five Years of Bushcare at Sublime Point Reserve, Leura

A new book by David Coleby

Sublime Point Reserve is a small reserve at Leura in the NSW Blue Mountains adjacent to the Blue Mountains National Park and close to the Sublime Point Lookout - around 100 km west of Sydney. David Coleby, author of this book, was instrumental in the formation of the Sublime Point Bushcare Group in 1996. He has led that group ever since in the restoration process. This book celebrates and describes the achievements over 25 years and records the environmental restoration of the formerly degraded public reserve.

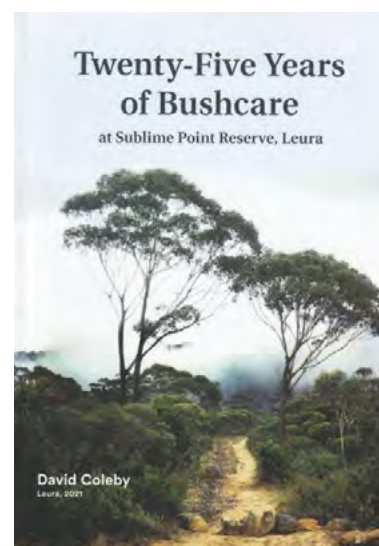
The reserve, is now a public asset for personal recreation along a network of well-maintained walking tracks, attracting family groups, bushwalkers, birdwatchers, and environmentalists. It is part of the proposed clifftop protection of Council's *Southern Escarpment Masterplan* (2018).

The book describes the attributes of the site and the steps taken to restore different parts of the reserve, such as weed control, revegetation, erosion control and track work. The book contains over 90 photographs which include the community members involved, before and after photos, and the flora and fauna found in the reserve. The Foreword, by Blue Mountains Mayor Mark Greenhill OAM, commends the 25 year history of the Sublime Point Bushcare group.

ISBN 978-0-646-82026-2. A5. 40 pages plus covers

Send your details (name, address, phone and email) to davidcoleby@bigpond.com for a return email about payment.

\$20 a copy, plus \$3 P+P



AABR Achievements 2022

2022 National Landcare Award

The recognition AABR garnered at the State and National Landcare conferences, winning the Partnerships in Landcare Award epitomises the significant drive and inspiration, along with goodwill that AABR members contribute to the organisation for the betterment of bushland. The Partnership Award recognised AABR's First Aid for Burned Bushland project which highlighted the need to provide timely and professional advice to well-intentioned under resourced landholders and land managers. AABR's unique combination of highly skilled practitioners with extensive skill sets and educational aptitude allowed AABR to provide a unique service in a timely manner.

Sponsorships and Donation

Sponsorship from business supporters continues to enable AABR to produce exceptional resources for the bush regeneration sector. Sincere thanks for the sponsorship support from the Paddy Pallin Foundation for the Heroes of the Big Scrub video.

Donations are generally received with memberships and the event/ticketing portal Givar has also enabled collection of donations when people book tickets for events.

Executive Officer

AABR Executive Officer, Suzanne Pritchard continues to keep our organisation running, leading our social media promotions, and generally picking up the mantle on so many of our projects.

AABR Events

Conference Presentation: 23-25 August 2022 National Landcare Conference. Peter Dixon presented in the Environment & Climate Change theme on the topic Bush Regeneration in a Changing Climate – from Resilience to Response.

Video Premiere: 26th October 2022 Heroes of the Big Scrub Movie Premiere. <https://www.aabr.org.au/heroes-of-the-big-scrub-watch-now/>

Workshops:

Grass ID for Bush Regenerators - May 2022

- 3 workshops at Kariang Neighbourhood Centre
- 3 workshops at Wollongbar DPI

22 June 2022 Bush Regeneration for Newcastle landcarers

Bush regeneration – Walks & Talks - AABR supported

- 11 February 2022 Demonstrating Drones – Hunter Wetlands National Park, Hexham
- 5 April 2022 Cooper Park Woollahra Council. Caring for the Bush.
- 5-7 April 2022 Scottsdale Bush Regen Camp with Bush Heritage
- 20 April 2022 Innovations in the Chemical Management of Vertebrate Pests, Richard Francis, Dr Linton Staples. RegenTV
- 18 June 2022 Ropes Creek - Cumberland Plain Woodland Walk, talk and hands-on weeding in celebration of John Diamond's legacy.
- 21 August 2022 Eastern Suburbs Banksia Scrub visit at North Head Sanctuary, Manly with Peter Jensen, Sydney Harbour Federation Trust and Danny Hirschfeld.
- 24 September 2022 Scheyville NP Using fire to restore Cumberland Plain Woodland with Xuela Sledge.

Membership

As at end of October 2022, AABR had 1,123 members, (increase from 1084 from February 2022). Members comprised the following categories: (Feb 2022 numbers are in brackets)

Accredited - 246 (235)	Pioneers - 37 (36)
Individuals - 484 (481)	Businesses - 41 (39)
Students - 263 (245)	Agencies - 19 (17)
NFP orgs - 15 (15)	Complimentary - 17 (16)

There is a turnover of members, with 106 new members but other members have not retained membership – generally students who only join while studying, with the rest being people who have moved out of the industry.

Location of Members: Victoria's membership has increased - now totalling 241 – up from 216 last year. It is good to see the success of their membership drive.

NSW - 715 most from Sydney north to the Qld border
QLD - 117 mainly Gold Coast, Brisbane and the Sunshine Coast
ACT - 7; SA - 5, TAS - 6, WA - 11, NZ - 1.

AABR Accreditation

Eleven AABR members were successful with Bush Regeneration Practitioner Accreditation from February to November 2022. This includes 6 from the first accreditation program in Victoria.

AABR Promotion

The AABR Newsletter is produced quarterly. During 2022 Nos. 151, 152, 153 were produced with Number 154 in preparation.

Nine event related eBulletins were produced and sent in 2022 to members (1,124) and also 1,580 non-member contacts.

Communication is also via:

- Twitter - @ARegenerators 19 followers
- LinkedIn-aabr-aus – 148 followers
- YouTube- regenTV – 517 subscribers
- Facebook – AusBushRegenerators - Followers - 4,116, Likes – 3,479

Website:

During the period 1st February 2022 to 30th October 2022 there were 21,000 users of the website. Bush Jobs continues to be a significant draw card attracting 5,500 views. Other pages drawing interest were volunteering (1,436), events (1,226) frog friendly plants (1,236), regenTV (1,000), the Business directory (982) and what is bush regeneration (926).

AABR Collaborations and Representations

Post fire Activities

Support from volunteers, which commenced under the Post-fire program, continues for some on-ground activities:

Collaborations

- **Gardening Responsibly** - Launch attended by Jane Gye and Virginia Bear
- **Bicycle NSW** – Chloe Mason
- **Big Scrub Landcare** - cross promotions with the premiere of Heroes of the Big Scrub video
- **Restoration Decade Alliance** - a consortium of 16 of Australia's peak environmental restoration organisations working together to galvanise action by all sectors of society to put their weight behind the UN Decade on Ecosystem Restoration. The Darwin Agreement outlines the collaboration.

- **SER Australasia** - AABR continues (as a formal Partner) to collaborate with SERA on revisions to and promotion of the National Standards for the Practice of Ecological Restoration in Australia - as well as the Albert Morris Award for outstanding Ecological Restoration that was awarded at the 2021 SERA conference.
- **Australian Network for Plant Conservation** - AABR is a Partner in ANPC's Healthy Seeds program to improve appropriate native seed production and supply to restoration projects. AABR's Rep on ANPC's Healthy Seeds Consortium is Peter Dixon.
- **Ecological Society of Australia** - AABR continues to be an Affiliate of ESA's journal Ecological Management & Restoration, and provides membership and journal discounts
- **Project Phoenix** - AABR is represented on Greening Australia's Project Phoenix External Technical Committee advising on \$5M post-fire seed needs strategy for the Federal government. AABR's rep is Peter Dixon.
- **Restore Australia** - Since January 2020, AABR has been represented on the Technical Advisory Committee of Restore Australia – an initiative of Global Evergreening Alliance and contributed advice and feedback on proposals to the major donors. Presented a bid to WWF (the contracted partner with RA) for a range of options for brokering skilled regenerators to guide-post fire volunteers. AABR's rep is Tein McDonald.
- **Great Eastern Ranges Initiative** - In late Jan 2020 AABR and Great Eastern Ranges Initiative created an informal network of around 20 environmental NGOs working in the post fire space. Multiple meetings were held which improved cooperation and collaboration between the groups, avoiding duplication and creating synergies. AABR's rep is Tein McDonald
- **WWF-Australia** - AABR has engaged with WWF through reviewing their post-wildfire guiding strategy for vegetation recovery and through submitting a proposal for brokering provision of experienced bush regeneration guides for post-wildfire volunteers.
- **Conservation Volunteers Australia** - AABR has engaged with CVA post-fire independently, through the post-fire environmental NGO network and through a three-way relationship being developed between our two organisations plus WWF-Australia.
- **Pew Foundation** - AABR participated in a collaboration involving about 100 NGOs and interest groups on Pew's proposal for conservation and land management economic stimulus package post COVID. AABR contributed a proposal for approximately \$1M worth of employment in ecological restoration with input from AABR members and bush regeneration contractors.
- **Landcare** - AABR developed relationships with both Landcare Australia Ltd and the National Landcare Network during the post-fire period, which will continue. We have commenced the process of signing an MOU with the NSW Landcare Network and will seek to do the same in future with the Victorian Landcare Network.
- **Planet Ark** - AABR has had a relationship with Planet Ark for many years, particularly with respect to providing alternative bush regeneration activities for National Tree Day (NTD).
- **Nature Stewards Victoria** - AABR has worked with Nature Stewards to seek potential for post-fire training for community volunteers and has given presentations to provide an overview of AABR.
- **Roadside Vegetation Advisory Group** - an AABR led collaboration with Transport for NSW and the Roadside Advisory Committee to strategically promote linear vegetation corridor management.

Representations

- **Restoration Decade Alliance** - Peter Dixon is AABR's representative.
- **NPA Urban Bushland Committee** - Peter Dixon is AABR's representative.
- **NSW Environmental Trust Technical Review Committee for Restoration and Rehabilitation Grants Program - Government and Community**. AABR Representative on the technical committee is Louise Brodie. Louise has recently stood down from this position.
- **NSW Nature Conservation Council**. Jane Gye is the rep on NCC's Bush Fire Advisory Committee and is an alternative NCC rep on NSW Roadside Environment Committee.
- **Places You Love Alliance** - Peter Dixon the AABR rep.
- **Skills Industry Advisory Group (National)** - Jen Ford is the AABR rep.
- **Skills Industry Advisory Group (NSW)** - Frank Gasparre is AABR's representative.
- **Victorian Skills Authority Primary Industry Advisory group** - Rob Scott and Kylie Robertson are the AABR reps.

Advocacy and Submissions

AABR submissions were made on the following issues:

- Environmental voluntarism in ACT responding to Inquiry by ACT Legislative Assembly Standing Committee on Environment, Climate Change and Biodiversity, May 2022
- Masterplan Stage 1: Ropes Creek Corridor, NSW responding to NSW Department Planning & Environment, 10 August 2022
- Native Forest Wood Waste in Renewable Energy Target (RET) Consultation paper, Department Climate Change Energy & Water, October 2022.

Submissions can be viewed at <https://www.aabr.org.au/about-aabr/policies/>

Sub-Committees

There are two AABR subcommittees:

- Accreditation Sub-committee – Tein McDonald (Chair)
- Victorian Branch - Rob Scott (Chair) <https://www.aabr.org.au/about-aabr/aabr-branches/aabr-victoria/>

Working Groups

- Chemicals In the Management of Biodiversity– Patrick Deasey (Chair). <https://www.aabr.org.au/aabr-projects/glyphosate-working-group/>
- Climate Change
- Education and Training – Agata Mitchell (Chair)
- Marketing and Communication– Jane Gye (Chair)
- Membership– Louise Brodie (Chair)
- Professional Bush Regenerators – Scott Meier (Chair)
- Reconstruction– Rob Scott (Chair)
- Walks and Talks- Chloe Mason (Chair)

Full reports on the activities of the Sub-Committees and Working Groups is found in the AABR Annual Report 2022 go to https://drive.google.com/file/d/1qliwzzHk2G5NdLKeGEUgUCj-vOu_Poia/view

For more information and contact details of the Chairs go to <https://www.aabr.org.au/about-aabr/aabr-committee-members/>

What's happening

7 – 10 August 2023
NSW Weed Conference



Submissions are now open to present at the 22nd NSW Weeds Conference in Dubbo 7 - 10 August 2023

Submission date 28th February 2023

Conference sub-themes are:

- Taming the Wild | Onground Weed Control Methods
- Searching the Wild | Weed Surveillance
- What's gone Wild
- Community and Stakeholders
- Networking and Sharing Knowledge

For information about submitting an abstract go to the following link - <https://www.nswweedsconf.org.au/wp-content/uploads/2022/11/Abstract-instructions-for-22nd-NSW-Weeds-conference-2023.pdf>

KEY DATES

28 February 2023:	CALL FOR PRESENTATIONS CLOSES
Mid-April 2023:	AUTHOR NOTIFICATIONS CIRCULATED
June 2023:	FINAL FULL PAPERS DUE
30 June 2023:	SPEAKER REGISTRATIONS CLOSE

Tuesday 26th September to
Saturday 30th 2023

SER2023

DARWIN AUSTRALIA
26-30 SEPTEMBER 2023

SER 2023

10th World Conference on Ecological Restoration

The Conference theme is
Nature and people as one: celebrating and restoring connection.

The conference will be held in person on 26-30 September 2023 in Darwin, Australia with a separate opportunity for virtual participation.

Abstracts are invited and the deadline for submission is 5th February 2023.

All abstracts, whether for the in person or virtual component of SER2023, must be submitted through the online system.

More information:

<https://ser2023.org/program/call-for-abstracts/>



Australian Association
of Bush Regenerators
Working with natural processes

The National Board

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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.

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Membership fees

Individuals	\$35 (unwaged \$20)
Organisations (<i>does not confer membership to individuals in the organisation</i>)	
• 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