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**March  
2022**

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# AABR NEWS

Australian Association of Bush Regenerators

*working with natural processes*

## AABR Events in NSW

**Register now**

**Site Visit**

**Cooper Park, Woollahra, Sydney**

Tuesday 5th April 2022

Cooper Park - Bush Regeneration and Bushcare

<https://www.eventbrite.com.au/e/cooper-park-council-caring-for-the-bush-tickets-230692586737>



## We are thrilled! AABR wins a NSW Landcare Award 2021



National  
Landcare  
Program



**AUSTRALIAN GOVERNMENT  
PARTNERSHIPS FOR  
LANDCARE AWARD**

**WINNER**

**Australian  
Association of Bush  
Regenerators**



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# President's Perspective

## Floods

As I write this column, thousands of people in places like Northern NSW, SE Qld and Broken Hill are cleaning up after flooding. I don't need to raise the devastating impact that these have had on individuals, companies and communities; the words and pictures we have seen in the media clearly show the impact and I hope that all who can help are doing so.

I do want to raise specifically the impact that these floods may have had on our ecosystems. Following on from the massive drought, bushfires and subsequent floods in some areas, these recent floods have the potential to fundamentally change ecosystems and geomorphology. Species that had been driven to the brink of local extinction could have been pushed over the edge. Barely recovering aquatic and riparian species could have lost much needed habitat.

We have already heard at AABR that many restoration sites have been severely impacted or wiped out. In some cases, years of work has been washed away or buried under tonnes of silt and debris. While regenerators are generally a positive lot, such impacts can affect the enthusiasm of volunteers to continue, or for funders to continue to resource projects.

It is important to remember that resilient ecosystems are better able to respond to and recover from extreme weather events and that all restoration sites are building that resilience. While the damage to project sites may have been great, the works done are likely going to result in a faster recovery of the environment as a whole.

We have had some initial discussions within AABR about how we could respond to these floods. There is a significant body of knowledge out there already in relation to managing land

after floods. As an early step we will compile information at a single site, so that people can access information relevant to their circumstances. We are also discussing whether we could fill information gaps, generate guidance materials, hold webinars and workshops or, as we did post fires, facilitate trained volunteers to find sites that need help. AABR will also be advocating to government that there is a need for investment to put trained bush regenerators into flood affected bushland to ensure that weeds don't establish and proliferate and that the native ecosystems can recover. With so many natural disasters in such a short period, it is imperative that the threats to ecosystem recovery are managed, and bush regenerators are one of the best ways to manage those threats

## Focus on Rainforest

In this UN Decade on Ecosystem Restoration, AABR will be having a focus topic each year. While we will be still covering all issues regeneration, we will have a focus thread in our activities and awareness raising

This year, our focus will be Rainforest Regeneration. We hope to continue highlighting the good work going on in this ecosystem throughout the year, raising awareness of projects and issues and supporting the community of practice as they document and promote best practice rainforest regeneration.

Our Big Scrub video, kindly sponsored by the Paddy Pallin Foundation will be released soon, and please keep an eye on the AABR website and Socials about upcoming events and announcements.

**Peter Dixon**

**President**

## Welcome to new AABR Members

Carmen Fu	Andreana Koutts
Rosie Clayton	Chloe Mason
Bernadette Longhurst	Digby Bishop
Ian Wheatland	Jennifer Stevens
Jake Groneberg	Karen Withers
Janaii Barlow	Kye Rothwell
Jemma Vernon	Linly Goh
Jeremy Houghton	Peter Hughes
Jimmy Chittenden	
Rian Marsh	<b>Agency</b>
Stephen Drew	Kingston City Council

*"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 becomes an Actor for the UN Decade on Ecosystem Restoration 2021-2030.

AABR applied and has recently been welcomed as an Actor for the [UN Decade on Ecosystem Restoration 2021-2030](#).

Thousands of ecosystem restoration initiatives are already driving positive changes on the ground and AABR is now part of this global movement. The UN Decade aims at supporting the acceleration of such initiatives and providing the platform for them to connect. AABR hopes to actively support this by helping with communication initiatives and activities at the national or sub-national levels. AABR is now part of [#GenerationRestoration](#), on behalf of the Food and Agriculture Organization of the United Nations (FAO) and the UN Environment Programme (UNEP), along with all UN Decade partners.

We support the



UNITED NATIONS DECADE ON  
**ECOSYSTEM  
RESTORATION**  
2021-2030



# Drones for Bushland Management

At the AABR field day at Hexham Swamp, near Newcastle NSW, Phil Milling, Managing Director of Sky Land Management, demonstrated and told us how drones can be used for a variety of land management activities.

Sky Land Management commenced in 2014, using high payload Unmanned Aerial Vehicles (UAV) - drones - which have primarily provided aerial spraying services for weed control.

The drone fleet comprises the latest XAG P30, high payload battery powered units, with a take-off weight of 38.5kg. With these drones multiple aircraft can be flown simultaneously, known as 'swarming'. Using a fully integrated Remote Piloted Aircraft System (RPAS) enables an accurate survey to be carried out, with the identification and treatment of areas with either liquid or granular pesticides, with precision. This is achieved using a fully integrated XMission survey drone or ground based (RTK) mapping to pinpoint and plan for targeted weed control by P30 agricultural drones.

This brings greater precision to weed management and reduces waste, costs, and environmental impacts.

**Safety:** Operation of drones on steep, unstable and uneven sites significantly reduces, or in many cases, eliminates the need for personnel in these hazardous areas. For aquatic environments, such as dams, wetlands or wastewater treatment ponds, weeds can be treated without the need to have personnel on the water - again a significant reduction in risk.

The system is set up to minimise the potential for exposure to chemicals, thus reducing the risk to personnel.

Sky Land Management is fully licenced by the Civil Aviation Safety Authority (CASA) and has been operating high payload UAVs / drones since 2014.

**Environment:** The potential environmental benefits are many. For example, the precision of the drone ensures targeted application, reduced herbicide and water use and the ability to customise areas such as 'Buffer Zones' and 'No Spray Zones'. Culturally sensitive areas may mean that access for weed management is restricted or not at all possible. However with our Remote Piloted Aircraft System (RPAS) the survey, map, plan and weed control is done without impacting on the site.

**Cost Effectiveness:** Cost savings both in the short and long term can be expected. More efficient and precise application also brings about chemical cost savings.



Drone over Hexham Swamp Supplied by Sky Land Management  
Photo: S. Pritchard

**More on Drones.** The AABR webinar on the 5th December 2021, provided information on the use of drones in environmental management. Notes on this can be found in Newsletter 150, and the recording can be viewed on the AABR Website and youtube.

- AABR's regenTV page <https://www.aabr.org.au/portfolio-items/what-can-drones-do-martin-bass/>
- Youtube <https://youtu.be/cboyir5jwTE>

## Sky Land Management and Hexham Swamp Project

Sky Land Management was engaged by Hunter Local Land Services to survey and treat target weed species from May 2021 to Jan 2022. The target species were *Juncus acutus*, groundsel bush and others as identified (pampas grass, camphor laurel). Treatment involved aerial spraying of the target weeds in Hexham Swamp with Unmanned Aerial Vehicle (UAV)

The designated zones within the LLS management areas of Hexham Swamp included:

- Area 'A' - located on the southern fringe of the swamp adjacent to the western Newcastle suburb of Maryland. Two focus areas here were adjacent to Callan Avenue and Whistler Parade.
- Area 'B' - located on the northern fringe at Hexham, adjacent to the main rail line.

These sites were aerially surveyed using an XMission unmanned aerial vehicle (here after referred to as 'UAV' or 'drone'). The high-definition imagery captured was then analysed, including ground truthing, to identify the main target areas, primarily patches of *Juncus acutus* (spiny rush). A treatment plan was developed for precision targeting of these infestations with the P30 agricultural spray drone. The flight path plan shows the exact transition routes of the P30 to the treatment sites and the treatment zones (red hatching) that were sprayed.

Using the P30 drone, 6.4 hectares of weeds, primarily *Juncus acutus*, were aerially treated - Area 'A' 5.3ha, and Area 'B' 1.1ha.

Both Area 'A' (Callan Avenue site only) and Area 'B' received primary as well as a follow up treatment. The primary treatment took place in May 2021 and the follow up in November 2021.

In addition to aerial spraying the budget allowed for a few days of ground spraying. This was to start the process of treating small infestations which were too small to safely treat with the UAV/ drone. This primarily targeted *Juncus acutus*, plus other isolated plants of groundsel, pampas grass and camphor laurel.

There is still a considerable amount of weed management to do at these sites, and continuous and ongoing primary and follow up treatment will be needed.

<https://www.skylandmanagement.com.au/>



Hexham Swamp - Area B. Flight Plan showing flight paths and treatment areas.

Supplied by Sky Land Management

# BERG Mt Martha

## Angela Kirsner - BERG Mt Martha committee member & volunteer for many years

The Balcombe Estuary Reserves Group Mt Martha is a friends group formed to preserve and restore the unique ecology of Balcombe Estuary, the lower reaches of Balcombe Creek, and the surrounding bushland reserves. The reserves are on the Mornington Peninsula on the eastern side of Port Phillip Bay around 80 km from Melbourne, and cover some 60 hectares of bushland, including about 9 to 10 hectares along the coastal strip either side of the estuary. Balcombe Estuary is the most intact estuary remaining on the eastern side of Port Phillip Bay, and the tracks and boardwalks that meander through the bushland are a prime draw card for locals and visitors alike. The reserves are owned or managed by the Mornington Peninsula Shire Council.



Above: View across the Balcombe Creek Estuary taken from the north bank near the Esplanade Bridge

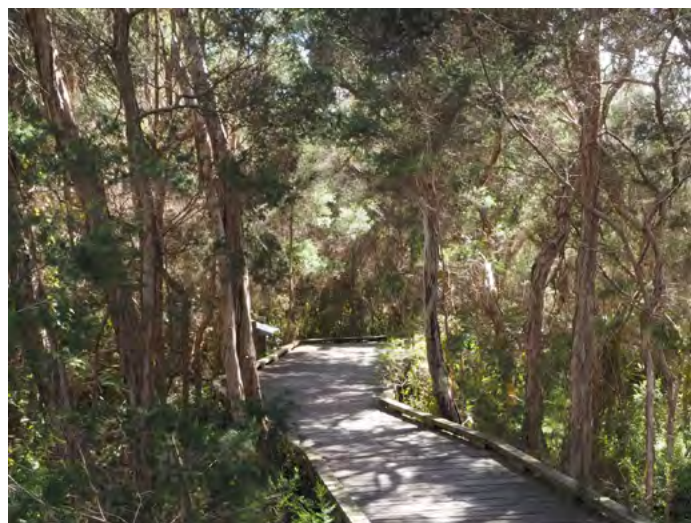
Right: A much-used boardwalk winds through swamp scrub along the creek, among the Melaleucas.

## Membership and community awareness

There has always been a strong focus on membership and community involvement. That first president talked many locals and visitors into joining at the start. Community days, letterbox drops, Weedbuster stalls at Mt Martha Village, Clean Up Australia Day, and a host of other outreach and community activities have continued this focus. And many of us are proactive in chatting up neighbours, friends, walkers we meet, and interested passers-by when we are working in the reserves.

## Building links and partnerships

The new organisation rapidly built strong links with the Mornington Peninsula Shire and relevant State Government environmental and funding bodies – another pattern that has persisted and expanded.



In particular, BERG Mt Martha has worked closely with the Shire's Natural Systems Team, and our relationship with the Shire's bushland contractors (who have, for many years, been Naturelinks) has been one of mutual learning and respect. Naturelinks' work with us is supported by the Shire, which has an annual budget for its bushland contractors across the Peninsula. BERG Mt Martha also continues to win substantial grant funding, which also supports work by contractors as well as equipment, education and a range of other activities.

Each year we meet with the Natural Systems Team and Naturelinks to plan the year's on-ground works. Naturelinks generally undertakes the more physically demanding work, and work that requires specialist expertise, while our on-ground volunteers support, complement and extend this.

Over time we have also developed links with the First Nations people of the Peninsula, teaching us much about the cultural values and heritage of our reserves, and informing our management practices.

Environmental studies are part of all school curricula, and we have hosted many visits by school groups, from preps through to senior years, with workshops, plantings, and explorations of flora and fauna. We have also collaborated with tertiary education institutions, supporting and gaining from student research projects. We started by approaching local schools, inviting them to bring their kids along to help us plant and learn about the reserves' critters and plants. Looking for water bugs with our Waterwatchers has always been a drawcard! Soon, schools and tertiary institutions were approaching us with ideas and requests.

In 1997 a group of Mt Martha residents got together to form a Friends group that would protect the Balcombe Estuary and its bushland. The impetus was a threat that public tennis courts would be extended further into the bushland.

That meeting saw the birth of a remarkably successful group, the Balcombe Estuary Reserves Group Mt Martha – BERG Mt Martha. It rapidly became one of the most effective, active and respected Friends groups on the Peninsula.

What has made it so successful?

## A clearly articulated purpose

One of the first things the new Friends group did was to define its purpose and long-term goal. This has been refined and honed over the years, but it has remained the organisation's touchstone, the basis for regular strategy planning to set objectives and map out activities in the short and longer term.

## A range of skills

BERG Mt Martha's instigator and first president, by force of personality and gentle coercion, gathered together a committee with strong and varied skills, including financial, organisational and communication, and – critically important – a visionary Field Officer, who still guides the group's field work and rapidly became a whiz at grant writing. This foundation has stood BERG Mt Martha in excellent stead.

There was turnover and much learning to be done, but while some skills have come and gone over the years, the group's breadth and strength have been maintained, sometimes through serendipity, but mostly through proactive head-hunting.





Over some years, the Friday Group, which works every Friday morning, has transformed this old quarry area, once mined for road metal, into an indigenous haven for small birds. Morning tea is an integral part of the activity! Photo Liz Barraclough.

Quite apart from the imperative of engaging young people in the environment, such activities have further expanded the group's reach and community support.

More recently, our 'Business Partners' program has flourished, with local traders, shops and businesses responding to our invitations to support us both financially and/or in kind.

All these strategies have helped to build BERG Mt Martha's profile, consolidate its standing in the community, and develop community support.

#### **A significant site to protect**

The Balcombe Estuary Reserves are Mt Martha's bushland heart, an oasis in an increasingly urbanised environment. Their ~60 hectares of bushland along Balcombe Creek are traversed by walking tracks and boardwalk, connecting with The Briars across the Nepean Highway as part of an important biolink and bushland corridor for wildlife. Locals love the reserves and use them constantly, and they attract visitors from far afield – walking groups, families, picnickers, educational groups and lots more. This high profile not only means strong community support for our work, but it also helps in attracting funding to improve a community amenity.

#### **A citizen science, evidence-based approach**

From the start, BERG Mt Martha has had a strong 'citizen science' approach, and has gained funding to support these projects from Federal and State grants and Shire Community Grants. Flora and fauna surveys were commissioned and are repeated at roughly ten-year intervals. More detailed monitoring has tracked conditions in the bushland and provided a measure of the success or otherwise of our bushland management strategies. Similarly, Waterwatch and more recently EstuaryWatch have tracked the health of the creek from early on. We know our reserves well and have kept increasingly good records of what we have achieved.

Importantly, there has been a management plan in place almost from the start, developed and updated in conjunction with the Shire's Natural Systems Team, and management decisions are informed by this knowledge and evidence we have gathered, as well as by best practice.

We have also been part of a range of other Citizen Science projects, and have found them a great way to recruit and engage a diverse range of people and age groups.

#### **Up-skilling our volunteers**

Developing the skills of our volunteers has also been a priority. BERG Mt Martha has obtained grant funding to send many interested members to bushland management workshops, training days, IT courses and much more. The result is a body of engaged, informed and capable volunteers.



From the south end of Esplanade Bridge, looking up the estuary.

#### **Channels of communications**

We publish a great bi-monthly newsletter with longer articles on many areas of interest. Our vibrant Facebook and Instagram pages provide more snappy, immediate communication.

BERG Mt Martha has been proactive in using new technology to streamline its operation. We had a website up and running when this was still relatively rare. More recently we have put in place a sophisticated system to manage membership and supporter communications, and we use Google Drive to store records and share resources. We've been fortunate to have members able to make all this happen, and to bring some of our more technologically challenged volunteers on board!

#### **Cherish volunteers!**

It's fun working with BERG Mt Martha!

We turn on an excellent morning tea at our many working bees, supported by a baking roster of volunteers – indeed, we have a reputation to keep up! We throw first-rate parties and events to celebrate our work and thank our volunteers. We never put pressure on our volunteers. We don't ask them to do things they don't want to do, but aim to engage them in their areas of interest. We firmly believe they should not feel obligated, but free to come and go as they please.

#### **Find out more about BERG Mt Martha**

Visit our website at <https://www.berg.org.au/> - you can also find our newsletters here.

Go to our Facebook page at <https://www.facebook.com/BalcombeEstuaryReservesGroup/> and find us on Instagram at [#bergmtmartha](https://www.instagram.com/bergmtmartha)

Thanks to Liz Barraclough for her input.



"BERGers" weeding in the Old Campground. This area, once a public camping ground beside the estuary, is the gateway to the reserves, with picnic tables, interpretive signage, and playground.

Photos: Angela Kirsner unless otherwise indicated.



## Save the Date for proposed Korinderie Ridge Regen week - Aug 3-7, 2022

The Korinderie Ridge community on the NSW far north coast is hoping to welcome visiting regenerators back to this beautiful bushland property in August. The week is still to be confirmed, because the north coast NSW district has been severely affected by floods, and the community is supporting flood affected friends.

Lantana is the focus each morning with the afternoon spent relaxing or visiting local sites. Camping gear is needed. To reserve a place or receive further information, please phone Rachel on 0493 407 260 or email [regenweek@korinderie.org.au](mailto:regenweek@korinderie.org.au). More info: [www.korinderie.org.au](http://www.korinderie.org.au) or <https://www.facebook.com/groups/123320521036743/>



Volunteers chatting as they pull out lantana at Korinderie in 2017. Foreground (L-R) Brian Stanley, Ben Henderson and Judith Stanley. (Community member Mattie Peirce in the background)

## 2022 Dates for Bush Regeneration at Crowdy Bay National Park, NSW

Crowdy Bay on the NSW mid north coast, is one of the post-fire sites where AABR has been able to send volunteers to join the local group. Sites that we spent some time in last year have seen plants leaping high out of the ground.

### Dates for your diary

- **Regeneration Camp 2022** – Monday 23rd to Sunday 29th May – a program of work at various sites.
- **Mini Regen Camp** – Wednesday 14th to Saturday 17th September – attention on Kylie's Beach littoral rainforest.

Please make sure if you wish to attend that you notify me and I can let you know what needs to be done.

Tom [thomas.clarke7@bigpond.com](mailto:thomas.clarke7@bigpond.com)

# AABR Drone Field Day at Hexham Swamp

Neridah Davies

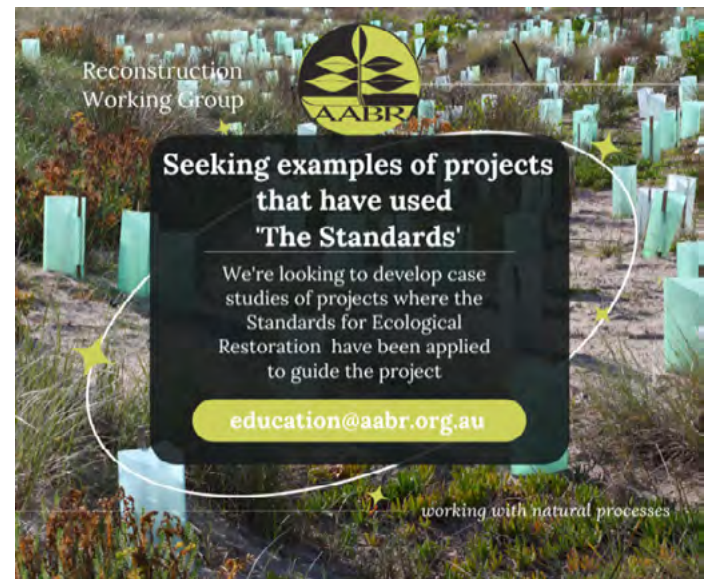
I recently attended the AABR Drone Demonstration on February 11th, along with around 25 others. This was held at Hexham Swamp, near Newcastle in NSW. Phil Milling from Sky Land Management was our host and teacher.

There is nothing like self-interest to motivate me to explore new ways of doing things. I've done my fair share of long walks with heavy, herbicide filled sprayers to gain access to a site for weed spraying, not to mention the trudging through swamps and pushing through spikes and prickles. Now, advances in technology mean that the end of those days of drudgery is in sight. This AABR field day demonstrating the use of drones spraying *Juncus acutus* at the Hexham Swamp was informative and visually impressive.

We all watched as the drone took off on its pre-programmed flight to travel to the designated area and then deliver the spray to the

## Are you using The Standards?

Contact Suzanne at [education@aabr.org.au](mailto:education@aabr.org.au)



## Donate to help restoration sites affected by flooding

At this stage donations are an ideal way to help. The following organisations are accepting donations to help landholders and groups restore/remediate flood damaged areas.

- **Foundation for National Parks and Wildlife**  
<https://fnpw.org.au/donations/>
- **Richmond Landcare Incorporated**  
Details on a pinned post at <https://www.facebook.com/RichmondLandcare>

allocated area by flying back and forth in strips. Similar to aerial herbicide application, drones are able to deliver herbicide with a reduced water/ha rate and a reduced herbicide/ha rate compared to high volume spraying. Prior to our arrival they had used drones to accurately survey the area, then identified the area for treatment.

More recently, since working for a native grass seed producer, Cumberland Plain Seeds, I can see the benefit of drones spreading seed in areas where hand seeding and tractors are not suitable, for example on very steep slopes.

I have been asked to give a 'participant's perspective' so, for me, an AABR event is not just about the presentation, I enjoy catching up with past colleagues and swapping ideas with others in the industry. I found the morning interesting and fun with some unexpected ideas to consider from the presentation and from the incidental conversations with others in the industry.



Left: Group at AABR Field Day, Hexham Wetlands  
11th Feb 2022

Right: Checking out the Unmanned Aerial Vehicle / Drone.

Photos: Suzanne Pritchard



# President's Report for 2021 – Peter Dixon

I would like to thank all the people who contribute to make AABR what it is and who continue to raise the reputation and reach of both AABR and bush regeneration. Board members make great contributions and I would particularly like to acknowledge Tein McDonald and Jane Gye, who have helped me significantly over the last year and dedicate many hours to AABR and its projects, and thank outgoing board members Deb Holloman and Alex Milicic for their contribution. Also our Executive Officer, Suzanne Pritchard for keeping our organisation running. Special thanks to Virginia Bear, Louise Brodie, and Danny Hirschfeld, who contribute countless hours, as they have done for decades. Also to acknowledge the people who volunteer on our subcommittees and working groups.

Like many organisations, AABR's activities over the last year have been impacted by COVID. Our in-person activities were put on hold while we learnt to engage via the interwebs. We held successful events online, including the launch of the video "Renewal in the Desert" and talks on using drones in environmental management. Our Chemicals in the Management of Biodiversity working group also held very popular online talks.

During the year, new working groups were convened, and existing ones continued to operate. I believe these working groups are the best way for AABR to engage with its members in specific areas of mutual interest as well as to engage with non-members who help contribute to improving the amount and quality of bush regeneration that is carried out. I encourage everyone to see if they could contribute a bit of time to any of our working groups in an area that they are passionate about.

The Accreditation Sub-Committee continues to undertake its very important role. While many people see being accredited as a bush regenerator as just a nice thing to have, we hope to communicate better the advantages of accreditation and to create some specific benefits for accredited members.

This year saw the beginnings of collaboration with some like-minded

NGOs and ideally the start of some long term relationships. We will run a series of online and in person events in NSW with the NSW National Parks Association. We are working with the NSW Nature Conservation Council to engage with Transport for NSW on better roadside management; hopefully with any protocols/policy developed being transferable across Australia. We have had discussions with Trees for Life in South Australia and we hope to be able to work with them to expand our membership and activities in SA.

AABR is one of fourteen Australasian environmental restoration organisations in a consortium to support the recommendations of the UN Decade on Ecosystem Restoration. The consortium agreement, (*Darwin Agreement*), was initiated at the SERA2021 Darwin conference.

AABR continued to support the Albert Morris Award, with partners the Society for Ecological Restoration Australia and the Barrier Field Naturalists Club. This year's winner was the Marra Creek water ponding project.

The grant for the *First Aid for Burned Bushland* project was acquitted this year. We want to see what we can do to continue in this space. Areas burnt in the extensive fires of 20-21 will need ongoing and adaptive management for many years, and there is an opportunity to both gather data and provide guidance.

This was the first year operating under the new AABR Constitution. We have applied to the Australian Charities and Not for Profit Commission for AABR to become a charity which will help with fundraising to allow us to undertake more projects.

As part of our new structure, we also had our inaugural National Forum, where the Chairs of the Board, Branches and Working Groups come together to discuss what their groups are doing, explore opportunities and plan for future work.

On a personal note, it has been a bit strange coming back to the AABR Presidency after so many years. It was nice to see some of the legacies from my previous stint still in place and there are so many people still passionate and involved in the group who were here last time I was President. It felt like coming home.

## AABR Achievements 2021

Despite the limitations placed on some activities by COVID restrictions, AABR continues to be active on a number of fronts, which are outlined in this report.

### AABR Events

COVID restrictions resulted in online webinars. These can be accessed through AABR [regenTV](#) or summaries in the [Newsletter](#).

- 23/6/21 Landcare Webinar Series - Natural Resource Management - traditional methods to modern innovation. Tein McDonald (30 min): <https://landcareaustralia.org.au/natural-resource-management-webinar/>
- 16/7/21 Renewal in the Desert - movie premiere (157 registrations, 652 views)
- 21/7/21 CIMB WG Guest Speaker – Off-label Chemical use
- 29/9/21 Jane Gye gave a presentation to North Sydney Bushcare on what AABR does.
- 6/10/21 Danny Hirschfeld conducted a presentation to North Sydney Council Bushcare volunteers on listing Eastern Suburbs Banksia Scrub as an EEC
- 17/11/21 CIMB WG Guest Speaker – Get up to date on Glyphosate. The MAV report and how it impacted Kingston Council in Victoria.
- 19/11/21 Resilient Regeneration- DIY home regen in a changing climate - Peter Dixon presented for Karuah Great Lakes Landcare
- 6/12/21 Webinar - Drones for Environmental Management - presenter Martin Bass

- 9/12/21 AABR Vic Guest Speaker Craig McGrath- Using the National Restoration Standards in Contract management – A council's perspective

### Post fire Activities

The Post-fire program continue to support on-ground activities and to deliver educational resources and share knowledge.

#### FABB Videos and fact sheets

First Aid for Burned Bushland. The FABB series of six short videos funded by sponsors was completed and has been extremely popular with over 4000 views to date.

#### Post-fire webinars

13/4/21 Post fire regeneration in NSW - 12 months on. Webinar - 36 attendees/+255 views, funded by FNPW

26/5/21 Supporting recovery of fire-affected bushland in East Gippsland webinar – (85 attendees/+183 views, co-host with Trust for Nature and funded by FNPW).

#### Conferences

AABR members presented post-fire experiences at two conferences:

**SERA Conference session** - Assisted Regeneration - Appropriate responses to the Black Summer wildfire in NSW Australia.

Moderator: (Dr) Tein McDonald.

Presentations on post-fire regeneration:

- NSW subtropical rainforest at Milton – Gerard Proust, (Proust Bushland Services)



- Crowdy Bay NP, NSW – Tom Clarke (Australian Association of Bush Regenerators)
- Wanganui NSW. Post-fire dilemmas at a mixed forest edge – Joanne Green, Landholder, Wanganui, NSW.
- Barrington Tops National Park World Heritage Area, NSW – Boyd Carney (NSW National Parks and Wildlife Service)
- Grassland assisted regeneration Scottsdale, Bredbo – Tein McDonald (Australian Association of Bush Regenerators)

#### **NCC Biennial Bushfire Conference –Cool, Warm Hot 4-5 May 2021**

- Tein McDonald - Harnessing the power of fire for restoration gains – learning from the efforts of multiple emergency responders
- Scott Meier - Before, after, during? Where does the bush regenerator fit into a fire event?

## Membership

The membership numbers are for the 12 months from mid-Feb 2021 to mid-Feb 2022. As at mid-February 2021 AABR has 1084 members, (increase from 1056).

Members comprised the following categories: (2020 in brackets)

Accredited – 235 (236)	Pioneers – 36 (36)
Individuals – 481 (471)	Businesses – 39 (33)
Students – 245 (236)	Agencies – 17 (17)
NFP orgs – 15 (12)	Complimentary – 16 (16)

The increase in numbers is small, but there are 119 new members with around 90 members not renewing membership. Those not renewing have mainly been some of the free student members (while studying), with the rest generally being people who have moved out of the industry.

Location of Members:

Victoria – now totalling 216 – up from 209 last year.  
NSW 693 -most from Sydney north to the Qld border  
QLD 111 mainly Gold Coast, Brisbane, and the Sunshine Coast  
ACT 7; SA 6, TAS 6, WA 8, NZ 1.

## AABR Accreditation

Seven AABR members were approved for accreditation between Feb 2021 to Dec 2021.

Plans to hold assessments in Victoria were put on hold due to COVID and are planned for early 2022.

## AABR Collaborations

**Roadside Vegetation Advisory Group** (NSW) is a collaboration between AABR, the NSW Nature Conservation Council and Transport for NSW.

**Barrier Field Naturalists Club** (Broken Hill) - 100-year celebration of the Club with the production of the *Renewal* in the Desert video (672 views) and premiere.

**Restoration Decade Alliance** - consortium of 14 of Australia's peak environmental restoration organisations 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. Peter Dixon is AABR's representative.

**Society for Ecological Restoration Australasia (SERA)** - 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*. Also the Albert Morris Award for outstanding Ecological Restoration, 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 revise the Florabank Guidelines. 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** - Greening Australia's Project Phoenix External Technical Committee advising on \$5M post-fire seed needs strategy for the Federal government. Rep is Peter Dixon.

**Restore Australia** - Since January 2020, Rep on the Technical Advisory Committee of Restore Australia – an initiative of Global Evergreening Alliance. Rep: Tein McDonald.

**Great Eastern Ranges Initiative (GER)** - Jan 2020 AABR and GER Initiative created an informal network of around 20 environmental NGOs working in the post fire space. Meetings to improved cooperation and collaboration between the groups, avoiding duplication and creating synergies. Rep: Tein McDonald.

**World Wildlife Fund (WWF) -Australia** - post-wildfire activities.

**Conservation Volunteers Australia** - 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** - 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.

**Landcare** - developed relationships with both Landcare Australia Ltd and the National Landcare Network during the post-fire period, which will continue. 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 providing participants with an overview of AABR.

## AABR Representations

**Place You Love Alliance.** Rep is Peter Dixon.

**National Parks Association of NSW Urban Bushland Committee.** Rep is Peter Dixon.

**NSW Environmental Trust Technical Review Committee for Restoration and Rehabilitation Grants Program** - Government and Community. Louise Brodie is on this committee.

**NSW Nature Conservation Council.** Jane Gye is an alternative NCC rep on NSW Roadside Environment Committee and a member of NCC's Bush Fire Advisory Committee.

**Skills Industry Advisory Group (National).** Rep is Jen Ford.

**Skills Industry Advisory Group (NSW)** Rep is Frank Gasparre.

**Victorian Skills Authority Primary Industry Advisory group.** Reps are Rob Scott and Kylie Robertson.

## Advocacy and Submissions

AABR submissions were made on the following issues

- Draft Kosciuszko Horse Management Plan
- Strategy for the Australian Native Seed Sector
- Main Works Modification Snowy2 project
- NCC conference Motion 2021/C – Increased support for Travelling Stock Reserves Submitted by AABR.



# Working Group & Sub-Committee Reports

## Vic Branch (Sub-Committee) - Rob Scott (Chair)

There are currently 216 Financial Victorian members. <https://www.aabr.org.au/about-aabr/aabr-branches/aabr-victoria/>

### Activities over the past year

- Initiated and chaired the Chemicals in the Management of Biodiversity (CIMB) Working Group
- Craig McGrath - talk on using the Standards
- Started the Reconstruction Working group
- Success! Swinburne University of Technology is now developing a traineeship program under the new CEM. Kylie Robertson and Rob Scott on the Vic Advisory group
- Hand weeding presentation developed
- Accreditation program progressing slow with COVID
- Rob Scott spoke to 3 Nature Stewards groups about AABR.

### Priorities for 2022

- Traineeships promotion
- Input to the State Government Industry Advisory Group
- Reconstruction guidelines group
- Input to the Industry subcommittee
- Accreditation – assessing applicants, assessor workshop
- Hand weeding presentation, notes, field day and video
- Talks/Forums/field days
- Victorian-specific news emails and focus on marketing.

## Accreditation Sub-committee – Tein McDonald (Chair)

Oversees AABR's accreditation program.

### Activities over the past year

- Induction of new cohort of assessors
- Prepare for Victorian Accreditation program to commence in 2022
- Updating of documentation
- Processed applications.

### Priorities for 2022

- Establish Victorian Accreditation program
- Streamline Accreditation processing
- Promotion of Accreditation across the bush regen sector

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

With 17 members explores the use/non-use of chemicals.

**Activities over the past year :** Monthly meetings. Exploring topics with the aid of external experts. Guest speakers included representatives from the APVMA and Agriculture Vic on Off Label chemical use (100 registrations), and the findings of the Municipal Association of Victoria trial on Alternative herbicides to glyphosate.

### Priorities for 2022

- Continued brainstorming of forums
- Template development for other forums and webinars
- Sharing of admin load and reduction in costs
- Possibility of charging for attendance or increased sponsorship.

## Education and Training Working Group – Agata Mitchell (Chair)

The scope of activities being considered for this group is to advocate for appropriate training for bush regenerators, develop/review/ facilitate educational resources to support the Conservation & Ecosystem Management qualification and develop a resource repository. Provide non-accredited training for practitioners, guidance and principles to act as a watch dog/advocate, ensuring teaching to the units of competencies and teachers are appropriately competent to teach. Review RTOs to ensure delivery within a bush regen context. and maintain a register of RTOs delivering NAR in a bush regen context and develop relationships to support delivery of materials.

### Priorities for 2022

- Support provision of training resources and materials or RTOs
- Develop a repository for access of high quality resources

- Webinars with subject matter expert - 40 min- online platform
- Relationships with other organisations to expand the message and promote repository and social media platforms.

## Professional Bush Regenerators Working Group – Scott Meier (Chair)

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

### Activities over the past year

- Developed a brief issues table
- Committee member discussion regarding the formation of an industry relevant working group (WG), how to garner interest for a WG, the potential terms of reference and outcomes of a WG.
- Discussion regarding
  - Revision of "Bush Regeneration: A Practical Guide to Contract Management" (2003)
  - Failings of the Restoring Biodiversity Industry Association
  - Development of an industry wide survey to canvass the issues, concerns, and directions of the restoration industry
  - Interaction with other WG.

### Priorities for 2022

- Develop and disseminate the industry wide survey
- Develop a committee with broad industry representation
- Begin to interact with various sections of the industry that have the capacity to deliver real change for the benefit of indigenous ecosystems.

## Reconstruction Working Group – Rob Scott (Chair)

The purpose of this group is to

- Prepare guidance for practitioners and managers involved in reconstructing plant communities
- Consider potential for AABR to be involved in a reconstruction accreditation system
- Link with other AABR working groups (e.g., Training and Contractors) to identify potential current or future synergies.

### Priorities for 2022

- **Resource Repository** - review and assemble existing resources (including case studies and clear terminology) for RTO use for Conservation and Ecosystem Management courses
- **Brief overview guideline** to help draw the main messages together, link resources and fill gaps
- **Discussion paper on potential for AABR developing an accreditation system** for the practice of reconstruction/ revegetation - what makes a good reconstruction project and what are the competencies of a practitioner in this field.

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

To expand AABR's presence within the restoration sector.

### Priorities for 2022

- Annually review and implement social media strategy
- Undertake and review annual survey of members
- Develop a campaign calendar around promotions
- Promoting Membership and Accreditation
- Review website content
- Identify marketing segments and marketing elements
- Support partnerships and collaborations
- Review advertising policy and relationships with advertisers.

## Membership Working Group – Louise Brodie (Chair)

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

### Priorities for 2022

- Review of membership categories and fee structures
- A scoping paper for membership benefits.

# Science Saving Rainforest the Big Scrub

Tony Parkes, the Founder and President of Big Scrub Landcare and rainforest regenerator, spoke at the AABR AGM about this project being carried out for the Big Scrub area.

The Big Scrub was the largest expanse of lowland subtropical rainforest of approximately 75,000 hectares on rich volcanic and alluvial soils between Byron Bay, Ballina, and Lismore in northern NSW.

Tragically it was cleared for agriculture, mainly dairy farming, and by 1900 only one percent remained in about 100 scattered small remnants.

## Big Scrub Landcare and restoration

Big Scrub Landcare (BSL) was founded in 1993 and now looks after ~50 remnants covering about 800 hectares and has actively re-established about 600 ha of rainforest.

When starting the restoration and regeneration program initially the concern was weed growth being the main threat. The lack of genetic diversity was identified as a long-term threat to the survival of the remnants and re-established rainforest. Pessimistic predictions were for the eventual collapse of the vegetation. Some species were only there as 4-5 plants and the 2.5 million trees planted lacked genetic diversity with seed collected often from a small sample of each species.

## Collaboration with the Royal Botanic Gardens, Sydney

BSL contacted Maurizio Rossetto, a senior research scientist from the Royal Botanic Gardens in Sydney. Maurizio is working on the Restore and Renew Program, which works with plant genomes to directly inform management and conservation activities. BSL spoke with Maurizio about lack of the genetic diversity in the remnants and also in the seed collected. Initial research confirmed the lack of genetic diversity.

BSL and Maurizio developed a program to apply the best genetic science to restoration of the Big Scrub. The initial plan was to select 25 species found in the Big Scrub and look at their genetic diversity across their entire geographical range. This involved collecting leaves from around 200 individual trees of each of these species. It is a large task as the range of some species stretches from south of Sydney to the wet tropics. Other species have a very small range especially threatened species.

The number of species selected has expanded to 60, made up of 30 threatened species and 30 key structural species. Leaf sample collection has been hindered by COVID and is taking longer than

expected. It is hoped by the end of March all leaf samples will be collected for 8 threatened species and 25 key structural species. By the completion, leaf samples of 12000 individuals will have been collected.

The leaf samples are sent to a contractor who does DNA sequencing for each sample. The data is sent to the RGB, and a genome analysis is carried out to see the variation across the range of each species. This is related to a large number of ecological variables and information from climate change models. The outcome is to identify up to 20 individual trees of the 60 species that will provide optimal genetic biodiversity and capability to deal with climate change, new insects, and new diseases.

Once identified, cuttings will be collected. Where not possible seeds or juveniles will be collected. These will be grown in a nursery to produce the planting stock for the seed plantation. It is anticipated that 3 seed plantations will be set up.

Seeds from the plantations will be harvested and provided to nurseries to produce genetically diverse planting stock for rainforest restoration plantings.

This has never been done before and will take 6-7 years for the plants to flower and seed. Demonstration sites will be set up showing 30 key species to form the nucleus of restoration planting together with the usual range of pioneer and secondary species.



Lumley Park, part of the Big Scrub

Photo: :Little Gecko

## Future AABR Events IN NSW

Save the Date for these events. Information on registration will be available soon.

### Site Visit: North Head, Manly

Sunday 21st August, 2022

Eastern Suburbs Banksia Scrub – Fire management

Eastern Suburbs Banksia Scrub was the 1st ecological community listed as threatened in NSW. Come and see how fire is being used to manage its natural regeneration. And see what happened when a fire got out of control in 2020. Hosted by Sydney Harbour Federation Trust.

### Site Visit: Scheyville National Park

Saturday 3rd September 2022

Using fire to restore Cumberland Plain woodland

See areas of Cumberland Plain Woodland that have been burnt and/or trittered/thinned to open up thick mid-stories into the original open grassy woodland. Cumberland Plain Restoration Program site (Saving our Species funded), Hosted by Greater Sydney Landcare Network.

### Site Visit

Ben Ricketts Environmental Preserve, Jamberoo Mountain

10th -13th November 2022 (to be confirmed)

Thursday and Friday visit for land managers etc;

Saturday and Sunday visit for AABR members

Spend 2 days visiting this site. Opportunity to stay overnight. Learn about the area and its management. Spend time walking through the forest.

More information soon

### Want to showcase your work and share your project?

Why not hold a forum, training session or site visit?

Contact Suzanne at [education@aabr.org.au](mailto:education@aabr.org.au) and she can help you with all the things required to hold and publicise an event.



# What's on our member's minds?

## Sue Gould: Galvanising action now or never - particularly training, focus on riparian corridors and green employment

The critical value of biodiversity and natural ecosystems is becoming increasingly clear to decision makers (see references listed below). Widespread social and economic impacts of extreme climate events and the global COVID-19 pandemic are leading to a more widespread realisation among the public of our dependence on nature and biodiversity. Perhaps the political and economic conditions are developing that will provide more support for large scale restoration programs.

Current rates of biodiversity loss provide clear evidence of how unsustainable our current relationship with nature is (see references listed below). It confirms that we urgently need to (1) conserve all remaining intact ecosystems and (2) restore ecosystems and (3) restore ecological connectivity and that we need to do this at a large scale. Clearly there are needs for conservation advocates, research, legislative reform, education etc and clearly there are many people already working in this space.

In this 2021-2030 UN Decade on Ecosystem Restoration, I think that we should be planning (and eventually implementing) some large scale restoration projects in Australia - such as restoring river systems and riparian corridors (Project Platypus?):

1. if there isn't already a coalition of groups working together on a national program for conserving and restoring indigenous Australian ecosystems I think that there should be a coalition of organisations working together to provide a vision and strategy consisting of:
  - a. private conservation organisations (eg. Bush Heritage, Australian Wildlife Conservancy)
  - b. individual landholders and supporting organisations (eg Great Eastern Ranges Initiative (GERI), Australian Land Conservation Alliance, Trust for Nature, Humane Society International)
  - c. managers of public land estates (eg NPWS, Crown Lands, Department of Defence, local governments)
  - d. ecological and land management experts
  - e. ecological restoration practitioners (SERA, AABR)
  - f. advocates for legislative reform
  - g. experts in policy development
  - h. conservation volunteering organisations (eg Greening Australia, Landcare, Gondwanalink, Conservation Volunteers Australia)
2. As people with practical field experience, AABR members are potential providers of team leaders for conservation volunteer teams or potential training providers to individual landholders. In addition to thinking about what change is required for ecological restoration to be scaled up, AABR should be thinking about what it would take for ecosystem restoration practitioners to play an effective role in a large scale restoration strategy. What are our capacity constraints? What are the obstacles to young people choosing bush regeneration as a career option? How can restoration practitioners with local on-ground experience be more involved in planning and program delivery? What additional skills and training might be needed for AABR members to become successful volunteer leaders, providers of training, participants in planning and program delivery. Perhaps we could workshop with an organisation like GERI to work out what sort of training would be useful. Perhaps AABR could develop additional materials for advocacy / education around the need for restoring indigenous landscapes?

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Sue Gould, Editor - AudioWings, Memberships -AABR, SERI, ESA, IntAct TAG  
Research Fellow - Griffith Climate Change Response Program

### AABR's accreditation trip to southern states

Towards the end of February 2022, AABR accreditation assessors Danny Hirschfeld and Tein McDonald visited Melbourne to conduct assessments of seven long-experienced bush regeneration applicants. The intent of the trip was to find candidates for a future team of accredited bush regenerators to form the core of a home-grown team of Victorian Assessors. The trip has been planned for over a year but was delayed by the many COVID lockdowns and travel restrictions between states.

Should a core group of assessors be identified, the next step will be for an AABR assessor team to return to Melbourne to conduct an induction workshop of the new Victorian assessors. As well as inducting the new assessors, the workshop would also provide an opportunity for cross-fertilisation of techniques and terminology between states, so that we can develop a truly national system of bush regeneration practitioner accreditation.

While in the south, Danny and Tein also visited Adelaide on a fact-finding visit and to catch up on long overdue assessments there. While the group of AABR members in South Australia is much smaller than in Victoria, AABR maintains a strong interest in assisting South Australian AABR members to consider forming their own branch should membership increase. To that end AABR met with Natasha Davies, CEO of Trees for Life, and Amelia Hurren, Manager of their Bush For Life program. We also met with members of the Nature Conservation Society of SA – namely Patrick O'Connor (Chair) and Andrew Allanson (committee member and 'AABR pioneer bush regenerator' awardee). Both organisations are happy to support the formation of an AABR branch in SA should local interest grow sufficiently over the next year or two. In the meantime, AABR is committed to assisting South Australian members to spread the word about bush regeneration (and AABR) among South Australia's volunteer and contractor communities.

# Historically significant use of stock exclosure and natural regeneration to restore arid lands in South Australia and New South Wales

**Peter Ardill, Blue Mountains NSW**  
**Accredited practitioner AABR**

Many AABR members will be familiar with the pioneering Broken Hill regeneration area project initiated by Albert and Margaret Morris and their Barrier Field Naturalists Club colleagues in 1936. This article reveals that the regeneration area project was only one chapter in a complex restoration story.

We now know that like the Broken Hill restorationists, South Australian pastoralists were also utilising stock exclosure, natural regeneration and furrowing techniques in the 1930s. Furthermore, pioneering South Australian and New South Wales government policies and legislation endorsed these techniques as appropriate responses to indigenous vegetation loss and resultant wind erosion. Restoration was now a mainstream land management practice!

## South Australia

Following dispossession of First Nations communities by military forces and squatters, a pastoral industry was established in the central and north-eastern arid-zone regions of South Australia from approximately 1870. Widespread degradation of the indigenous vegetation and wind erosion soon afflicted these regions, and the industry.

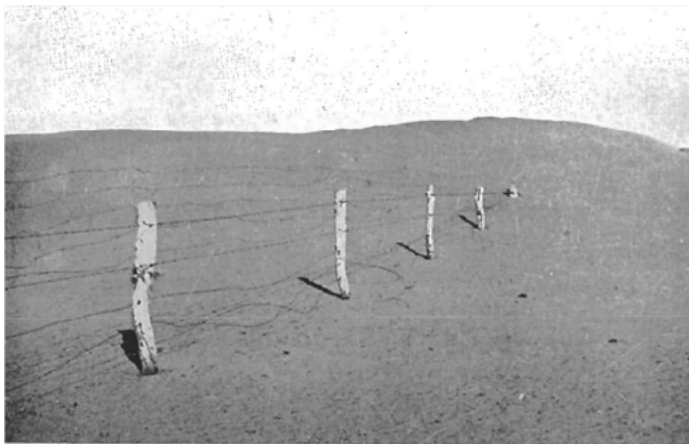


Fig 1. Severe soil-drift. Source: South Australian Soil Conservation Committee 1937-38.

By the mid-1920s the plant ecologist, Professor T G Osborn, had concluded that overstocking was the primary cause of the vegetation degradation and erosion (Fig 1). He demonstrated that stock exclosure (fencing to exclude stock) facilitated natural regeneration of the indigenous vegetation. Osborn advised pastoralists to carefully manage sheep and cattle stocking levels, and took an interest in the application of his research findings to actual restoration projects.

We now know that Osborn's work appears to have caught the attention of pastoralists worried about the extent of erosion damage on their properties (Fig 2). George Jenkins, owner of Wirraminna station near Port Augusta, fenced off a series of 'flora reserves' from circa 1930, and achieved spectacular natural



Fig 2 A windswept plain in pastoral country with only a few Spear-grass plants. Source: South Australian Soil Conservation Committee 1937-38.

regeneration of the local perennial indigenous vegetation. Revegetated soil-drifts rapidly stabilised (Fig 3). Throughout the 1930s more pastoralists established flora reserves and restored indigenous vegetation.

Furrowing was another restoration practice taken up by pastoralists keen to restore wind eroded lands. Encouraged by Koonamore researcher Terrence Paltridge, Melton station manager Walter Smith initiated a furrowing project on a bare soil-drift in ca.1930, and by 1939 substantial regeneration of perennial indigenous vegetation had been achieved. Although not always successful, furrowing of soil-drifts and scalded arid lands had become a widespread practice in South Australia by circa 1940 (Fig 4).

The 1930s flora reserve and furrowing projects deeply impressed scientists such as Dr A E V Richardson, influential newspaper editors, state premier Richard Butler and administrators concerned about the extent of wind erosion damage in South Australia. In 1936, the South Australian government endorsed stock exclosure, natural regeneration, furrowing and environmentally sensitive stocking practices as official land management policies. Financial aid was also offered to pastoralists attempting to regenerate eroded lands. Additionally, these policies were codified in a new, progressive *SA Soil Conservation Act 1939*.



Fig 3 Wirraminna flora reserve in 1936 after five years of fencing. Source: H Peters Collection State Library South Australia B77568/86.





Fig 4 Recovery of vegetation on a pastoral holding after ploughing furrows and protecting from grazing animals.  
Source: *South Australian Soil Conservation Committee 1937-38.*

## New South Wales

The First Nations communities of western NSW had been effectively dispossessed of their carefully managed homelands by approximately 1880; confinement to government reserves and oppressive treatment followed. The new pastoral industry and exploitative overstocking practices resulted in widespread degradation of arid-zone indigenous vegetation communities.

Broken Hill assayer Albert Morris, a skilled botanist and conservationist, had been interested in the repair of eroded arid lands since the early 1920s. He condemned overstocking in 1923, and had quite likely become aware of HH Osborn's research work by approximately 1928. Morris was conducting successful furrowing regeneration experiments from 1935, and in 1936 initiated the Broken Hill regeneration area project. At this time the natural regeneration of certain indigenous flora species, such as *Eucalyptus* spp., was a familiar concept to many settler Australians, but Morris's extensive knowledge of the regenerative capabilities of the indigenous arid-zone vegetation communities was exceptional. Sam Clayton, leading NSW and international erosion advisor, visited the project in 1938, and was very impressed by the natural regeneration outcomes achieved under stock enclosure conditions.

NSW Soil Conservation Service researcher Noel Beadle appreciated the relevance of the regeneration area's revegetation successes to wind erosion management. He never met Albert Morris, who had died from illness in January 1939. However, when staying in Broken Hill, Beadle did visit Margaret Morris (personal communication by email on 13/01/2022 from botanist Dr Barbara Briggs AM PSM, niece of Margaret Morris). Beadle may well have directly benefited from Margaret's extensive engagement with the regeneration area project. Certainly,

Beadle acknowledged Albert's (1923) and Margaret's (1939) publications and their regeneration work in his landmark 1948 book, *The Vegetation and Pastures of Western New South Wales*.

We now know that the stunning revegetation outcomes of the regeneration area project strongly influenced Beadle throughout the 1940s. He initiated experiments with natural regeneration and furrowing on wind eroded sites, encouraged the development of ecologically sensitive stocking policies, established a nursery and distributed thousands of saltbushes to pastoralists for planting in soil stabilising pastoral station reserves.

Beadle, Clayton and state premier William McKell, directly influenced by the regeneration area project, forged the development of state government policies that adopted stock enclosure and natural regeneration concepts as a means of restoring the eroded arid regions of Broken Hill. The regeneration area project was completed in 1958, but unfortunately, plans for a series of regeneration areas throughout western NSW faltered. However from 1959, a 5000 hectare regeneration area was established at Cobar and is extant today.

The Morris's restoration legacy was impressive! In 1949, the *NSW Western Lands (Amendment) Act 1939* was enacted. Stock enclosure and natural regeneration were codified as state government land restoration practices and policies, and a ban on overstocking was included in the Act. These policies were intended to facilitate the government's attempts to restore the estimated 20 million hectares of eroded arid land that extended throughout western NSW.

## Summary

The various South Australian and NSW restoration projects in the 1930s, which included the Broken Hill regeneration area project, were substantial responses to a widespread environmental crisis, wind erosion, that posed serious social and economic problems for Australia. The projects and their impacts significantly influenced the development of environmentally focused land management policies and legislation. It is now reasonable to believe that a start to the development in Australia of a formal, scientifically vindicated body of environmental repair thought and practice characterised by an intention to reverse degradation can be traced to approximately 1930, several decades earlier than previously considered.

**Reference:** Ardill, Peter J (2022) *'Rekindling memory of environmental repair responses to the Australian wind erosion crisis of 1930–45: ecologically aligned restoration of degraded arid-zone pastoral lands and the resultant shaping of state soil conservation policies'* (January) The Repair Press Sydney.

Available at <https://ecologicalrestorationhistory.org/articles/>



## Conservation in Action

Climate | Bushfires | Wildlife

Orange NSW  
2, 3 & 4 May 2022



## Conservation in Action 2022

This is a unique conference that brings together industry leaders in the conservation field. It will bring together all disciplines of natural resource management to facilitate the transition of cutting-edge environmental research into on-ground action.

Speakers include Craig Reucassel, David Lindenmayer, Kate McBride, Dale Nimmo, Kate Harriden, David Keith and more to be announced soon.

More information: <http://www.cwcewa.com.au/conservation-in-action> Facebook: <https://www.facebook.com/CONSERVATION2021>

Sponsored by: Central West Councils Environment & Waterways Alliance, Sustainable Farms, NSW Local Land Services

# The Beginnings of Bushcare in North Sydney Council

**Andrew Scott**  
**North Sydney Council Bushcare Officer and**  
**AABR Board Member**

North Sydney Council (NSC) is on the northern side of Sydney Harbour. The Bushcare program will celebrate its 30th Anniversary in April 2023. Though not the first, we were early adopters of the Bushcare movement. Some of the earliest urban bushland volunteer groups began regeneration work in surrounding suburbs e.g., Beecroft and Cheltenham Reserves in Hornsby (1964) and Greenwich Point, Lane Cove (1965), the later under the guidance Joan Bradley herself. Lane Cove Council is thought to have employed the first bush regeneration company Bradley & May (1978).

Readers may be interested to know that Joan and Eileen Bradley grew up in Neutral Bay and attended school at Wenona, located directly opposite North Sydney Council Chambers. The sisters developed their minimal disturbance method of bush regeneration during the mid-1960s in Ashton Park, Mosman. Now part of Sydney Harbour National Park, Ashton Park was close to their home (at that time) in Clifton Gardens. Interestingly, an early trial of their technique was conducted in North Sydney in 1975 with funding sourced from the National Estate. Specifically where in North Sydney LGA remains a mystery.

The National Trust of Australia (NT) were influential as advocates of the Bradley method of bush regeneration. They approached a number of Councils including North Sydney to survey bushland areas, prepare management plans and ultimately provide professional bush regeneration services. By the early 1980s, National Trust bush regenerators were working in several of our reserves - Joan is believed to have been a roving supervisor at the time.

One of these National Trust workers was Charles Boyd, a local resident who would later 'retire' to become one of our first bushcaring volunteers. Charles was a colourful character, a former principal dancer for Borovansky Jubilee Ballet Co. (50-52) and second officer of Alan Strom's (Chief Guardian of Fauna with NSW Gov.) Flora and Fauna Protection Panel, ranging throughout the state in search of areas of natural vegetation to identify and

record for preservation. I had the pleasure of meeting Charles when I was a trainee for the NT (circa 98), he would join us to weed Balls Head and was well-liked. In an early North Sydney Bushcare newsletter, Charles recalled the early days of volunteer bush regen – before it was endorsed by Council. He said:

"When I saw Council Rangers, I used to hide in the bush and wait until they went past, then, I'd come out and continue to pull out weeds." Charles was one of five volunteers who formed the Friends of Balls Head to act in the interest of the reserve's management and its roadside approaches, in preparation for the 1988 Bicentenary Celebrations. The decision to form this "precursor" to Bushcare was made at a Waverton Precinct Committee Meeting. North Sydney's Precinct Committees continue to play an important role in community consultation and decision-making to this day.

North Sydney Council's Bushcare program officially started in April 1993 as a one-year trial to improve environmental awareness and participation in the management of urban bushland reserves. The employment of our first Bushcare Coordinator, Mr Gerard Tuckerman, was jointly funded by Council and the NSW Department of Planning's Metropolitan Green Space Program.



Sydney red gums *Angophora costata* at Balls Head Reserve.

The initial stage of development for North Sydney's Bushcare program occurred over a three-month period, which included a public awareness campaign in local newspapers and on radio stations, as well as presentations at various precinct meetings. Concerned community members were encouraged to letterbox neighbours to help recruit support and then attend site meetings, where the formation of a group and selection of bushland sites suitable for rehabilitation were discussed.

Initially, seven Bushcare groups were set up in Brightmore Reserve, Primrose Park, Tryon Avenue (now Badangi Reserve), Cremorne Point, Forsyth Park, Smoothey Park and Tunks Park. Most groups were supervised by a council bush regenerator. Tools were dropped off and weed bags collected at others (e.g. Balls Head) where experienced bush regenerators, like Charles, were volunteering. Gerard estimated 12 groups would eventually form – as has occurred – plus the addition of a nursery group in 2011. The expected limitations to group formation were thought to include demographics and the topography, size and proximity of our 16 bushland reserves to property owners. Today, most of our groups are supported by a core of six to eight volunteers each represented by a Bushcare Group Convenor whose role it is to confirm attendance for scheduled meetings, relay information from the Bushland Team and represent the views of group members at biannual Bushcare Convenor meetings.



Charles Boyd, Group Coordinator at Balls Head from 1998 to 2003.

Charles had a varied career. As a ballet dancer he joined the Ballet Rambert in London and after spending time in World War II in the army, joined the Borovansky Ballet in Australia. He then became a field officer with the Flora and Fauna Panel (which in 1967 became part of the NSW National Parks and Wildlife Service) and his role included identifying land which was gazetted as Wildlife Refuges. He later worked as a bush regenerator with the National Trust.





Left: Much of North Sydney Council's bushland has harbour views.

The headland in the photo shows the bushland of Balls Head Reserve with the bushland on the left within HMAS Waterhen. These areas contain cultural heritage of the Cammeraygal people.

The building and wharf in the foreground is now the Coal Loader for Sustainability. This was an industrial site operating between the 1920s and the 1990s as a transfer depot for coal. The site was decommissioned in the early 1990s, dedicated as public open space in 1997 and formally transferred to North Sydney Council in 2003. It is now open to the public and displays best-practice sustainable technology, community gardens, the Bushcare Community Nursery, food gardens, and is a hub for environmental and sustainability programs and events. [https://www.northsydney.nsw.gov.au/Environment\\_Waste/The\\_Coal\\_Loader](https://www.northsydney.nsw.gov.au/Environment_Waste/The_Coal_Loader)

All our groups are supervised by members of the NSC Bushland Team. Our Bushland staff are qualified at Cert 3 Natural Resource Management level or equivalent. Introductory Bushcare training has been provided to our volunteers from the outset.

A supporting program of education was developed, in part, to meet the needs of the North Sydney's highly mobile population with a large proportion of renters who were thought to be unlikely to join a Bushcare group. This included the provision of a Bushcare Newsletter which is published still to this day, now with the assistance of Council's Communications Team. An annual events and activities program is shared with our partner Councils Lane Cove, Willoughby and Mosman.

The Bushcare program trial proved to be popular with the community and has enjoyed ongoing support from Council, having been largely funded through an Environmental Levy since 1994. Bushcare is an integral part of North Sydney's Bushland Plan of Management, which establishes management policy and direction for both council staff and the community and is closely linked with Council's overall land management objectives, as described in the North Sydney Community Strategic Plan 2018 – 2028.

North Sydney's Bushcare program was expanded under Rob Mather (1995-99), a former Ku-ring-gai Council Bushland Team member alongside Gerard Tuckerman and Mick Kelso (NSC Bush Regen Team Leader 1995-2016) to include Wildlife Watch - a citizen science program and Native Havens - home habitat gardening for residents. Rob also helped David Watts establish the Aboriginal Heritage Office, whose services include the monitoring of Aboriginal sites and advice for their protection. The Bushland Team's fire management practices began in 1996 and were likely influenced by the above-mentioned team members. Of interest to me is that Tein McDonald, AABR Board Member and former president, introduced the term Bushcare (with input from the volunteers) while working as a Bush Regeneration Officer for Ku-ring-gai Council in the early 1990s - there must be something in the water up there!

The Bushcare program has changed little since this time, except for the addition in 2000 of our annual tree planting weekend in Boorowa NSW, a town in the central west about 325 km west of Sydney. This is a unique partnership with Boorowa Community Landcare Group, initiated by Ross McLelland, a former NSC Bushcare Volunteer. Later, the Adopt-a-Plot program (2005) was established, where residents can sponsor or work on a plot of bushland under the supervision of a professional bush regenerator.



Celebrating 25 years of North Sydney Bushcare in 2018.

The COVID pandemic has been the greatest challenge for the North Sydney Bushcare program to date, as groups were unable to meet for three months in 2020 and 6 months in 2021. Participation has waned a little, as expected, but we are hopeful numbers will increase again during 2022. We are also conscious that long-term volunteers are retiring; around a quarter of our 108 active volunteers have been with us for 20 years or more. However, we are confident there will be a steady stream of prospective, semi and newly retired locals looking to contribute to the management of their local bushland areas.

See the Special Edition 25th Anniversary Spring 2018 edition 39 of North Sydney Council Bushcare Newsletter. This can be found at [www.northsydney.nsw.gov.au/bushcare](http://www.northsydney.nsw.gov.au/bushcare) which has more detail about the North Sydney Bushcare Program.

***As a recent appointee to the AABR Board, I would appeal to all Bushcarers to share your group and or program's history with AABR, in order to record a complete account of Bushcare and the integral role it has played in the bush regeneration industry within Greater Sydney.***

***Please forward correspondence to: [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)***

# What's happening

**Thursday 17th May 2022**



## Roadside Environment Committee Forum 2022

### Can Do Corridors: Highlighting Good Practices in Linear Reserve Environmental Management

When: Tuesday 17 May 2022

Where: NSW Teachers Federation Conference Centre, 23-33 Mary Street Surry Hills NSW 2010 (close to Central Station)

This forum is primarily for linear reserve managers including local councils and government agencies. It features speakers with a mix of research and practical linear reserve experience.

For more information and to register go to : [Roadside Environment Committee Forum 2022](#)

Contact Neil Dufty - Executive Officer [ndufty@molinstewart.com.au](mailto:ndufty@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.

Registration is now open

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

**Tuesday 23rd to Thursday 25th August 2022**



Landcare champion and ABC TV presenter Costa Georgiadis will host the three-day conference event at the International Convention Centre Darling Harbour in Sydney <https://nationallandcareconference.org.au/>



Australian Association of Bush Regenerators  
*Working with natural processes*

### The National Board President

Peter Dixon [president@aabr.org.au](mailto:president@aabr.org.au)

### Secretary

Jane Gye [secretary@aabr.org.au](mailto:secretary@aabr.org.au)

### Treasurer

Matthew Pearson, [aquaticfundity@outlook.com](mailto:aquaticfundity@outlook.com)

### Committee members

Tein McDonald, Scott Meier, Agata Mitchell, Rob Scott, Victoria Bakker, Chloe Mason and Andrew Scott.

### Administration and Public Officer

Suzanne Pritchard [admin@aabr.org.au](mailto:admin@aabr.org.au)

### Membership Officer

Louise Brodie [membership@aabr.org.au](mailto:membership@aabr.org.au)

### Website advertising

Mitra Gusheh [advertise@aabr.org.au](mailto:advertise@aabr.org.au)

### Victorian Branch

Enquiries please contact Rob at [rob.scott@naturelinks.com.au](mailto: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](http://www.aabr.org.au)**

**[enquiries@aabr.org.au](mailto: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](mailto:newsletter@aabr.org.au) 0407 068 688

*Opinions expressed in this newsletter are not necessarily those of AABR*