



AABR walks and talks 2007



Finding Critters in the bush



**A practical presentation
about fauna surveying
with Dr Arthur White**



When: Wednesday February 21 1:00-4:00pm

Where: Field of Mars Reserve Pittwater Road Ryde: meet in car park under the aqueduct

RSVP: Essential - numbers are limited to 40 people - to Chris Melrose by February 16 on 9438-3635 or 0407 705 140

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President's Perspectives

Hi there everyone,

Well it has been a great couple of years being the president of AABR and the time has come to take a back seat. What an opportunity it has been to gain insight into what I perceive as one of the most valuable young industries this country has. Few things are more important than what we do - restoring Australia's unique natural ecosystems.

I am most enthused about where the industry is heading and encourage you all to keep contributing to helping it grow and develop. Twenty years on here we are - plenty of issues to resolve with little resource to do it. This is the challenge we all face in the bush regeneration game whether we're a bush regenerator, contractor, bushland manager or bushcare coordinator.

One of the things about this industry that I love is the people, their ability to overcome major obstacles and dedicate their life or part of it towards helping the planet. I'd like to say a huge thank you for supporting the industry association and keeping it alive, likewise all the committee members. The new Committee is as follows:

President- Matt Springall

Vice President- Tim Baker

Treasurer- Paul Ibbetson

Secretary- Heather Stolle

Membership officer- Danny Hirschfield

Communications Officer- Peter Dixon

Committee members: Jane Gye, Chris, Melrose, Elisabeth Dark, Bronwyn Englaro, Wendy Kinsella

I would like to say a huge welcome to Bronwyn Englaro for joining the committee and also to Peter Dixon for continuing to be on the committee & committed to the betterment of the industry.

Now for a few words from the New president Matt Springall, thanks for taking up the challenge on behalf of all the committee and we wish you all the best in your role as president.

Tim Baker

Hi Folks,

It is indeed both an exciting and a challenging time for the bush regeneration industry as we know it. AABR's 20th anniversary is a significant milestone for a young industry and it was great to see so many founding and long serving members at the AABR picnic last November and hear their stories. I hope these stories continue to be told and the passion and enthusiasm they have for preserving our unique natural heritage carries forth throughout the bush regen community.

For many of you for which I am an unfamiliar face I hope to see you around the traps over time. I started in bush regen as a volunteer not long after leaving school and starting uni some 13 years ago. Since then I have worked in the industry with contractors, local government and now at Lane Cove National Park. While my experience is largely Sydney based I do know there is an amazing amount of bush regeneration and ecological restoration work happening around the state and beyond and there are many valuable lessons to learn from all around this vast country. In many different corners of Australia passionate people strive to protect for the future unique ecosystems which occur nowhere else on this planet.

Part of the solution to the many pressures placed on these complex systems is effective management of our natural areas. For this we need a sustainable bush regeneration industry that has adequate pay and conditions for its employees to remain in the industry and gain the experience needed for good decision making, and for bush regeneration works founded in robust science. To this end is our challenge, though in the years I've been involved I've certainly noticed a marked improvement in these areas, with greater professionalism in the industry, and journals such as Ecological Management and Restoration amongst others setting a high standard in peer reviewed research. This year's theme of monitoring hopes to further this aim as measuring the impact of bush regen works on biodiversity is an issue that both individuals and organisations continue to struggle with.

So that said, it's enough from me for the moment. If you know of anyone in the industry, passionate about our natural environment, and keen for improvements in this industry to continue, then give them a membership form and get them on board. We want to hear your thoughts and your input.

Happy regening!
Matt

AABR's early days: were you there ?

If people would like to contribute their memories of the setting up of AABR to a collection of such memories please send them, or pass them on, as emails, typed or clearly handwritten notes, on cassette, by phone or however

to:
Danie Ondinea
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Scarborough NSW 2515
(02) 4268 0952

or
Margaret Beavis
makrit@bigpond.net.au
9 Barana Pde
Roseville NSW 2069
(02) 9417 1562

Please write your memories as fully as you can, warts and all. There will be opportunities, down the track, to review what goes into the public domain via an archival record or a booklet.

All contributors will get to read the final draft.

Welcome to new members

Jim Morris
 Sharon Cummings
 David Filipczyk
 Merilyn House
 Vanessa Keyzer
 Deb Holloman
 Megan Hughes
 Colleen Long
 Mark Foster
 Tien Pham

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 Enquiries: Paul Ibbetson at ibb56@yahoo.com.au

Have you paid your dues ?

If you haven't already, please pay your annual membership or subscription fees for 2006/2007 as soon as possible. As much as we enjoy chatting to our "outstanding" supporters, there's a long list of equally important work which we could be doing. If you're unsure of your financial status, you can email Danny at membership@aabr.org.au or phone him on Mob: 0412-320-295. And note our new postal address on the back of this newsletter.

Sorry if we were late

There was a delay for a while last year in processing receipts for member and subscriber fees the Membership Officer would like to apologise to those affected. This was due to the loss of a family member.

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Highlight articles from 2006:

- Mapping vegetation condition in the context of biodiversity conservation*
 Philip Gibbons, Andre Zenger, Simon Jones, Paul Ryan
- An overview of methods used to assess vegetation condition at the scale of the site*
 Philip Gibbons, David Freudenberger
- Landcare and private conservation trusts: Fertile common ground?*
 Guy Fitzhardinge
- Integrating policy and science in natural resources: Why so difficult?*
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How it all began - Robin Buchanan's story of bush regeneration's early days

For the AABR 20th birthday picnic in November 2006, Robin Buchanan, bush regeneration teacher and Author of "Bush Regeneration Recovering Australian Landscapes" was asked to give her impressions of bush regen's beginnings.

Bradleys

It all began in the mid 1960s with the Bradley sisters. Joan (1916-1982) and Eileen (1911-1976) Bradley began removing weeds from bushland in Mosman in Clifton Gardens and Bradleys Head, now part of Sydney Harbour National Park. Joan had scientific training as an industrial chemist, was a good naturalist, had a sharp brain and was very skilled with her hands. She was also very articulate, on radio, television and in print and she made sure her message of managing urban bushland; weeds, fire and recreation was heard. Joan Bradley's booklet "Bush Regeneration" published in 1971, gave enormous boost to the interest, general management and weed control in Sydney's bushland. Her work was given extra scientific credibility in 1974 when Dr Don Adamson of Macquarie University and myself published a paper entitled "Exotic Plants in Urban Bushland in the Sydney Region" in The Proceedings of the Weed Society of NSW.

Joan had a strict plan of work: prevent deterioration of good areas, improve the next best area, hold the advantage gained, cautiously move into really bad areas and cautiously move into the worst areas. She also had strict rules for working in the bush: Watch your feet, disturb the soil as little as possible, preserve and replace the mulch, mulch with the weeds themselves, do not pile weeds in heaps, never hang weeds on weeds, remove all species of exotics from areas weeded, work with the weather and do not remove any plant you cannot identify.

She made sure all her team adhered to these plans and rules, indeed despite her bright sense of humour she was, to me in my early twenties, a very intimidating person.

People of the 1970s and 1980s

People that were important to me in the 1970s and early 1980s included those with a wide range of backgrounds. It is also women dominated.

Evelyn Hickey of the National Trust of New South Wales is the crucial person responsible for the acceptance and expansion of bush regeneration in Sydney. She was a nicely dressed, articulate and tenacious north shore lady who gave respectability and standing to what was then considered an outlandish activity. Evelyn Hickey initially became involved in bushland issues when fighting a proposed rubbish dump and hence playing field in the wetlands of Mowbray Park, opposite her home in Avian Crescent, a fight she and her group went on to win. If I remember rightly I first heard of her through Dr Don Adamson of Macquarie University and rang her at the Trust looking for some work at the end of my university course. She employed me to undertake a study of Blackwood, completed in 1977.

In 1975/76 The National Trust of New South Wales, at Evelyn Hickey's instigation, employed Joan and a

team of bush regenerators to work in a National Trust property, Blackwood Sanctuary at Beecroft. When I started work at Blackwood Sanctuary in 1975 Joan Bradley was the team leader and dominant personality but her off-sider Toni May was also a strong female. Team members included Shirley Slatyer, who owned a large property behind Blackwood, Joan Larking from Beecroft who went on to play a leading role in the National Trust's bush regeneration program, and Ralph Hawkins, one of Hornsby Shire's leading local historians.

Roslyn (Ros) Baxter, an alderman from Lane Cove Council, had a very early commitment to the bushland of Lane Cove and Lane Cove Council directly employed Joan Bradley, Toni May (Bradley and May) and a team of regenerators in the early 1970s (1974 I think). Ros chaired the first meeting to consider the formation of an association of bush regenerators in February 1985.

Residents of Willoughby Municipality also played a large role in my early years as bush regenerator. Beverly Blacklock of Castlecrag was an early adherent to the Bradley method and a notable force in keeping Castlecrag "native" through bush regeneration and by using local native plants provided by her nursery in the gardens of Castlecrag. She was the first person in my life who integrated the love of landscape, architecture, history, nature and who also had a strong sense of community values. She had a major influence on me and her premature death in the 1980s was a sad loss to the industry. Her name is still celebrated by an annual prize, funded by AABR, for a bush regeneration student at Ryde TAFE.

Other residents of Willoughby active over the late 1970s to early 1980s included Toni McKay of Artarmon, Jenny Roxburgh of North Bridge, Jenny Murray of Naremburn, and Harold and Gay Spies of Castle Cove. All played a role in the formation of AABR.

Two residents of Ku-ring-gai Municipality were also crucial in the early days and both played a vital role in the formation of AABR. Helen Petersen of South Turramurra first began her involvement with the proposal by Ku-ring-gai Council to build netball courts in pristine bushland on a ridge top at the end of Canoon Road South Turramurra. Unfortunately the battle was lost but STEP has gone on to be one of the premier conservation organisations in the northern suburbs and Helen went on to become heavily involved in bush regeneration and became the first president of AABR. Janet Fairlie-Cuninghame (also known by her maiden name, Saddington) of Pymble had had a long-term interest in the preservation of bushland and hence became an early regenerator and also became an office bearer when AABR was formed.

National Trust

Interest in bush regeneration grew rapidly and by 1980 five Sydney Local Councils were contracting the

National Trust to bush regenerate reserves. By 1983 the National Trust was employing bush regenerators in nine municipalities and thirty reserves. With this interest went a need for training. In 1980 the National Trust of Australia, NSW started bush regeneration classes on the weekends. These classes catered for people interested in doing volunteer work and those that went on to become part of paid teams. The involvement of the National Trust continued to grow, as residents demanded management of their bushland. Evelyn Hickey, now retired to run a bed and breakfast in the Wollombi Valley, and her team, Graham Quint, now Deputy Conservation Director of the National Trust of NSW, Reece McDougal, now Director of the Heritage Office, and myself, drew up many management plans for urban bushland over this time.

Wingham Brush

Wingham Brush, an area of less than ten hectares of floodplain rainforest on the Manning River 250 km from Sydney, played a crucial role in the development of bush regeneration and AABR. After years of neglect and degradation, a critical report was written by the New South Wales National Parks and Wildlife Service in 1978. Wingham Council sought advice from a number of organisations, including the National Trust. My memory is that Evelyn and I initially went up, did a site assessment and report and in 1980 Jenny Murray and I were sent up to teach a team of locals how to regenerate the Brush. Jenny and I soon realised that our methodology, working from good to bad in the understorey, and our techniques, herbicide free, were not going to work. In fact in our visits we learnt as much from the locals as they did from us. Evelyn Hickey and Joan Bradley saw Jenny and me as not doing an adequate job and we were replaced. This caused severe stress with Jenny & me on one side and Joan and Evelyn on the other.

Following our sacking from the Wingham project, there rapidly arose a major conflict between the Trust and the Wingham regenerators. This conflict was fuelled by: personality differences, philosophical differences and a poor understanding by the National Trust of the differences in basic ecological processes between the sclerophyll systems of Sydney and the process in Wingham Brush, Table 1.

Sydney/ National Trust	Wingham Brush
Generally sclerophyll system with an open canopy	Closed forest
Main diversity in the understorey	Diversity in the dominant layer, the trees
Nutrient and water from storm water drains lead immediately to weed invasion and death of natives	Addition of nutrients and water from flooding a normal part of the system
Slow rate of growth	Rapid growth
Nil to minimal use of herbicides	Herbicide essential due to rapid rate of weed growth
Insistence on working slowly in the understorey according to the Bradley plan of work and rules	Insistence that rapid work freeing the trees of vines to prevent tree death was essential

Table 1, Differences in ecosystems between Sydney and Wingham and philosophy between the National Trust and the Wingham Brush team.

The “Battle of the Brush” in 1984 between the team, led by John Stockard a local dentist, and the Trust was so intense and public that it was a major feature in the local papers around Wingham and it broke the Sydney bush regeneration scene into factions. Despite the heat and argument of the time it was this controversy that helped some of the leaders in bush regeneration to see that bush regeneration needed more than just a philosophy and weekend classes; it needed properly trained people with a strong education in ecology. The National Herbarium was eventually called in to monitor and assess the Wingham’s team’s methods. The report completed in 1989 found that the team was doing an excellent job.

Australian Bush Restoration

Subsequent to the Wingham experience, Jenny Murray, Norma Stuart (of Lane Cove), Helen Petersen and I formed a company called “Australian Bush Restoration”; the first company to be formed to specifically carry out works in bushland in Sydney (hence Australia) that did not involve Joan Bradley. The company did not last long and if I remember rightly we did a lot of “selective hand clearing” a method devised by Helen to reduce the weeds and fuel loads whilst maintaining as many natives as possible. I certainly remember working in Parrawi Park, Mosman, using this methodology.

Formation of AABR

AABR was born from conflict, a fact barely documented in the early minutes. There were two major problems that were splitting the bush regeneration scene. Both Janet Fairlie-Cuninghame and I remember “a lot of dissatisfaction with the National Trust management strategies at the time, especially people management” and conflict between strict Bradley adherents and those that thought it should be adapted (this was post – Wingham).

The documented formation of the Australian Association of Bush Regenerators starts in January 1985 with notes of a discussion held by Harold Spies and Jenny Murray re a proposed constitution. The National Trust Bush Regeneration News Sheet of February 1985 included a notice of meeting to “look into the establishment of an association for bush regenerators” to be held at Artarmon Library on the 24th of February. This first meeting was chaired by Roslyn Baxter and fifty people were present. There were two main concerns, the maintenance of standards and the type of organisation to form. Commonwealth funded Community Employment Programs (CEP) and the spread of volunteers (eg to Minnamurra Falls) meant that Joan Bradley and the National Trust no longer had control of bush regeneration. A steering committee was set up to investigate the type of organisation people wanted and a questionnaire subsequently sent out.

The results from the questionnaire were presented at the meeting on the 28th of August 1985. The replies to “Do you want a bush regenerators organisation?” resulted in fifty yes and thirty five no. Of the yes vote the majority wanted a professional body/guild rather than a social club, trade union or environmental group. When the August meeting carried the motion that; “This meeting formally agrees to the establishment of an Association” “a number of peopleleft the meeting”, presumably those that did not want an association.

Disagreement amongst those that did want an association starts to show in the minutes of the August meeting with Harold Spies expressing concern about maintaining standards and educating the public and Government on the principle of bush regeneration developed by Joan Bradley. Jenny Murray added that the association should protect the rights of members and monitor and protect working conditions.

There was a major ideological rift in the formation of a bush regeneration representative body in 1986; a rift not documented in the AABR records presumably because the minutes for the vital meeting went with the other side. This rift is remembered by Janet Fairlie-Cunninghame. Her recollection appears to be of events after one of the meetings between January 1986 and June 1986:

"I felt very disgusted, as did others. About 8 or 9 of us were commiserating in the carpark afterwards when I suggested that we should have a meeting of those present and that was what we did. I had already given a lot of thought as to the name and knew that we must register the name... ..Because at the meeting there had been a strong push to call the organization after the Bradleys and it was to enshrine the Bradley method alone and was supported by those who in general were not looking at the wider implications of Bushland Management we had some concern about the use of the term bush regeneration. I knew that it was very important to register the name, so it was agreed that I make sure I was in the city before the office opened at 9.00am. This I did and was first at the counter. Once the paperwork was dealt with I left, feeling very relieved that our mission was accomplished. On leaving the building I was aware that someone from the "opposition" was entering the building. I can only presume with a similar thought in mind. However, I knew that AABR was the name registered and that no other or similar name would be acceptable to the Office of Associations which if I recall was in Pitt Street"

So two groups and hence two organisations were formed, one strictly Bradley with strong loyalty to the National Trust (The Bush Regenerators' Society), the other prepared to adapt and with loyalty to bush regeneration rather than to a single employer (AABR).

The Inaugural meeting of the Australian Association of Bush Regenerators was held at North Ryde Community Aid Centre on the 14th June 1986 with a remarkably small number of people, only ten; Helen Petersen (voted president), Robin Buchanan (voted vice president) Toni McKay (voted honorary secretary), Heather Cooper (voted assistant

secretary), Sheila Murray, Robert Slatyer, Shirley Slatyer, Jenny Roxburgh (voted honorary treasurer), Chris Farmer (voted publicity officer), and Janet Fairlie-Cunninghame (voted minutes secretary).

AABR's committee minutes of November 1986 document a letter sent from The Bush Regenerators' Society asking for a meeting with AABR to discuss amalgamation.

Following the meeting a report to the interim committee of the Bush Regenerator's Society tells the story:

"Our delegation, comprising Harold Spies, Toni Stevenson and Dagmar Elias, met Helen Petersen, Jenny Roxburgh and Robin Buchanan of the A.A.B.R. on Wed. 28th. January to see if there was any possibility of our two associations uniting. Helen Petersen, the President of A.A.B.R., explained that it was not possible because:

(a) their association, the A.A.B.R., was established and incorporated with 34 members and had already embarked on a program of activities. This had required a great deal of work and the members would not be prepared to set aside these achievements and begin again.

(b) Although our two constitutions are almost identical except for, in the case of the A.A.B.R., the intentional omission of any reference to the "Bradley" method as opposed to the intentional inclusion in the society's constitution of the "Bradley" method and an acknowledgement to the Bradley sisters, this difference was fundamental. By not specifying any particular method, including "Bradley", the A.A.B.R. believed it had the freedom to embrace a wider membership, both now and in the future. Helen Petersen added that the name, "Bradley" method, had no significance for many of its members and that this would also apply to many future members.

In view of reason (b), the A.A.B.R. considered there was scope for more than one association of Bush Regenerators and specifically a "Bradley" association.

Finally, Helen, as President of A.A.B.R., said that all bush regenerators were welcome to apply for membership of "A.A.B.R."



Founding members Heather Cooper, Bob Slatyer, Shirley Slatyer, Janet Fairlie-Cunninghame, Robin Buchanan and Noela Jones were at the birthday picnic.

Foundation members of AABR were: Janet Fairlie-Cunninghame, Barbara Gibbons, Helen Petersen, Toni McKay, Robin Buchanan, Jenny Roxburgh, Heather Cooper, Ralph Hawkins, Chris Farmer, Sheila Murray, Bob and Shirley Slatyer and Noela Kirkwood (now Jones).

The first General Meeting of AABR was held at the Field of Mars visitors centre on the 22nd of November 1986. Meeting reports and discussion included; the financial statement (balance of \$116.64), a report on the displays held at the

discovery room at the Australian Museum, a proposed meeting with the Bush Regenerators Society, education for public and members, clarification of an award or status for bush regenerators, the new TAFE course, the brand new SEPP19 and fund raising with a garage sale.

TAFE courses

Helen Petersen and Janet Fairlie-Cuninghame were also instrumental in organising the first TAFE syllabus focused on bush regeneration in 1986. They did their best North Shore lady performance and went to see Neil Black, then head of horticulture at Ryde TAFE, and persuaded him that there was an industry that needed training. Certainly, correspondence to Ryde TAFE about the course is mentioned in the 1986 committee minutes. I wrote the first syllabus that was reviewed by Helen & Janet and then by TAFE committees. In 1987 Ryde College of TAFE was the first to run an accredited course in bush regeneration. TAFE employed several bush regenerators as part time teachers, including myself, to start this new course. This was an enormous step forward in status for bush regeneration and was well patronised from the start.

Books of the 1980s

Joan Bradley's book "Bringing Back the Bush" was published in 1988 and I also had two books published in the 1980s, "Common weeds of Sydney bushland" in 1981, and "Bush Regeneration recovering Australian landscapes" published in 1989 by TAFE NSW. It was this last book that gave bush regeneration the publicity and status it needed. Interest in bush regeneration and general land care was already high and this colourful book that was distributed across Australia in ordinary bookshops, helped legitimise bush regeneration as a worthwhile activity.

The 1990s

The 1990s saw bush regeneration grow as an industry. The first large contractor after the National Trust, Urban Bushland Management (UBM) was formed in 1990 by Judith Rawling, ex manager of the National Trust bush regeneration program.

The Certificate II and Certificate IV in bush regeneration was established in the New South Wales TAFE system. Many TAFE colleges in NSW started running these courses. Other States, notably Western Australia, also ran courses in bush regeneration.

In 1996 Tein McDonald completed her PH D "Ecosystem resilience and the restoration of damaged communities: a discussion focusing on Australian case studies". This thesis helped raise the profile of bush regeneration in the academic sphere. She is now editor of our own Journal "Ecological Management & Restoration" first published in 2000.

Volunteer training grew in Sydney; the keen volunteers with a bit of spare time came to TAFE and many of them are still leaders in the industry. Examples include Margaret Reidy, Noela Jones and Rymill Abel. Volunteer training by Local Councils also increased.

The new century

The AABR web site now lists 31 bush regeneration contractors, 23 in the greater Sydney area, and there are many more. This is a huge change from no interest in the 1960s followed by a monopoly by the National Trust in the 1970s. The range of services provided

by contractors is also enormous and includes: bush regeneration, weed removal, drainage and storm water works, indigenous plant supply, rock work, track work, abseiling, high volume weed spray, wetland restoration, top-soiling, creekline and wetland design, mine and tip rehabilitation, soil profile relocation and erosion control. This is a far cry from considering only the Bradley method suitable for bushland management.

There has been an enormous change in the training of the bush regeneration industry with the new nationally accredited training package in Conservation and Land Management introduced in 2003. This Conservation and Land Management training package has a specific strand specialising in natural area restoration. This has led to the Certificates I, II, III, IV and Diploma all being available across the country in natural area restoration. An enormous change from just a few weekend classes!

The industry still has many concerns. Those listed in recent discussions on the Bush Regeneration Listserv include: lack of appreciation of bushland, lack of resources to manage bushland, lack of adequate contract supervision, site supervisors without adequate experience, low pay, lack of permanent positions, lack of career path, low charge out rate, poor OH& S systems and concerns about the quality of TAFE courses.

Conclusion

Bush regeneration started with two "eccentric" women in the 1960s and over the last forty years it has transformed from a women dominated, low paid and odd activity into a professional legitimate industry with many areas of specialisation, a specific education and with a healthy mix of men and women. AABR was born from conflict and needs to continue to defend the value of the industry to Australia and to defend the special skills and knowledge inherent in managing complex ecosystems. To keep the skills and knowledge in the industry young people must receive decent wages and see a career path ahead of them. There is still much work to be done.

Disclaimer: Much of this paper is from my memory and dates may occasionally be inaccurate by a year or so. The people mentioned had a formative influence on me but it does not mean that others were not important to me or to the evolution of bush regeneration in the early days. Many in the northern suburbs have not been mentioned and those from south of the harbour receive almost no mention. This is because this paper is partly my history not the history of bush regeneration.

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TAFE Course changes

Bush regenerators have been concerned about a recent move to merge the Conservation and Land Management Training Package with those of Horticulture and Agriculture.

Readers of this newsletter may be aware that the TAFE (and other) courses in bush regeneration now conform to a national 'Conservation and Land Management' training package. During the development of this 'CLM training package' over 5 years ago, AABR formed a CLM Training Package Working group (with members from NSW and WA) to respond to the process of industry consultation that accompanied the development of the package. The working group made submissions to the process – mainly objecting to, among other things, the high number of units (i.e. subjects) in the package that were originally designed to suit other disciplines such as horticulture and agriculture. Our submissions resulted in some concessions, allowing subsequent courses run by Registered Training Organisations (RTOs) such as TAFE to squeeze our tried and true 'natural area restoration' stream content into courses and still conform to the nationally consistent assessment guidelines .

Over its first five years, ecologically sound CLM (Natural Area Restoration stream) courses have been run at a number of campuses of TAFE and other RTOs – particularly where the teachers have strong industry experience and have experience with the previous courses. AABR has been concerned, however, that where teachers do not have this experience with the old course or in regions where industry is not strongly involved, the training package can actually be misleading because of its apparent emphasis on horticultural and agricultural approaches.

5-year review.

The AABR working group sought to become involved in the package's first 5-year review, which commenced in 2005, run by Agri-Food Industry Skills Council on behalf of the Commonwealth Department of Education, Science and Training on funding. We were asked to wait for 2006's Stage 2 of the review, which was designed to seek consultation with industry, (Stage 1 consulted only employers and RTOs). No sooner had Stage 2 got rolling, however, than it was interrupted

by a new directive from the Agri-Food Industry Skills Council - a feasibility study into the potential to merge the CLM training package with the training packages of amenity horticulture and primary production.

This rang alarm bells for AABR. The initiative was justified on the basis of the already high number of units common to all three industries; with the logic being: if the 3 packages are already so similar, why not go the whole way and merge all three! But of course, as the actual problem with the existing package for our industry was the high number of common units (as well as lack of coverage of many of our unique competencies) we knew that more of the same would make the problem worse not better! So when the consultants undertaking the feasibility study sought input on this topic at a workshop in Sydney in October, AABR (NSW) sent along two reps.

At the workshop, the AABR reps, (myself and Jane Gye) questioned the merger on the grounds that we believed it would further reduce the current level of 'industry detail' in the composite package, exacerbating a problem that already exists. A few educators at the workshop proposed that a composite package could be put together that did not lose this detail. However, AABR NSW's formal submission, sent a few days after the workshop, reiterated our opposition to the proposed merging on those same grounds, proposing that the review of the original CLM training package should continue, with the outcome of keeping it separate and refining it to better suit our natural area restoration industry. Simultaneous submissions were also sent by AABR(WA), the QLD AABR network and groups and individuals in Victoria connected with the industry there. Many submissions were also sent from individual AABR members, which I'm sure has made a difference – so thanks to you all for that prompt and strong response.

Since that consultation process, the working group has been informed that work on all feasibility studies and reviews has been suspended by the Agri-Food Industry Skills Council because of lack of 'advice' from the Commonwealth Department of Education, Science and Training on funding.

We'll keep you in touch with any further progress on this important issue.

Tein McDonald
(Chair, AABR CLM Training Sub-Committee)

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Email: pittwater@yhansw.org.au

The Two Pats tackle the Mother of Millions at Pittwater YHA

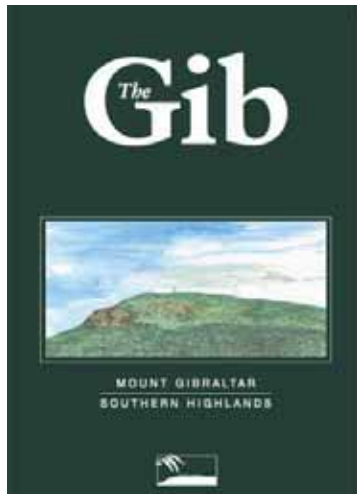
Bush regenerators Pat Bell and Pat Organ were patient and persistent with the mother of millions weed removal from the lower terraces of the Pittwater YHA.

Two very inspiring women with a great depth of knowledge about the bush.

Many thanks for your terrific effort.

Sarah Polomka
Pittwater YHA





The Gib: Mt Gibraltar, Southern Highlands NSW Gibraltar Bushland

Mount Gibraltar is the prominent tree-clad bluff giving character to the townships of Bowral and Mittagong, NSW

For 13 years a group of dedicated individuals has been involved in restoring the bush on Mount Gibraltar Reserve between Bowral and Mittagong. The work has

included bush regeneration in the endangered forest, and restoration of the public lookouts and picnic areas. Matching grants have been obtained to pay for the professional help of Proust Bushland Services for the really steep and difficult sites.

The Mount Gibraltar volunteers have been meeting every Thursday, and over the years agreed to record their accumulated information for the benefit of residents, visitors, students and changing agency staff.

Three years ago the group decided to put its findings to print by producing a book. The volunteers were joined by experts and specialists. An editorial committee, consisting of Jane Lemann, Julie-Rose

Moffatt, Jenny Simons, Elizabeth Smith, Carmen Wright and Michael Elphick, has spent considerable time researching, checking and compiling information, and has undertaken to publish the book.

It has been a mammoth task for the organisers, but one which has given them great satisfaction. We pay tribute to the financial support given by the community and the contributions made by various experts in their fields. "It is a true community project that provides information about our own place. Funds raised through the sale of the book will go towards further care of the Mount Gibraltar Reserve." We hope the book will be a valuable tool and a pleasure to own.

Delivery of the book is expected in April. It will also be available in local bookshops.

\$49.99. Hardback, approx 356 colour pages with photographs, maps and diagram.

Order forms, which offer a pre-publication discount, can be obtained from

Mount Gibraltar Book Project, PO Box 981, Bowral 2576 NSW or

Mount Gibraltar Book Project C/- Wingecarribee Shire Council, PO Box 141 Moss Vale 2577 NSW (tel. 4868 0888).

Introductory Weeds Management Manual

The Department of Environment and Heritage and the CRC for Weeds Management has just published an 'Introductory Weeds Management Manual'.

The manual is designed to be introductory guide for those with little experience with weed management, particularly environmental weeds.

It will be of some use as a start in developing weed management knowledge and skills, and as an extension resource for those who want to develop the weed

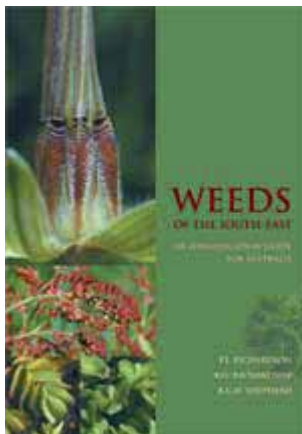
management capacity of others.

It is set out in modules that relate to the competency units for weed management in 'Conservation and Land Management'.

A free download and at www.weeds.crc.org.au

The CRC site also has their great range of Weed Management Guides and Best Practice Management Guides.

Weeds of the South East - an Identification Guide for Australia



By F.J. Richardson, R.G. Richardson and R.C.H. Shepherd.

This new comprehensive guide covers over 2000 weeds of agriculture, bushland, waterways, gardens, roadsides, wasteland and amenity areas. Many new and emerging problem species are included and the weeds are compared with easily confused native species.

It is written in easy-to-understand language, with more than 1600 colour photos

\$ 69.95 438 pages, full colour.

Available through the publisher's secure website www.weedinfo.com.au or call/fax on 03 5286 1533.

Ecology of the Cumberland Plain Woodland

A large new section on the Ecology of Cumberland Plain Woodland. Compiled by Lotte von Richter and Doug Benson, went live in Dec. 2006 06 on the BGT website.

www.rbgsyd.nsw.gov.au

Cooking with Weeds!

What was on the menu ? Trad and Ehrharta, a bush regenerator's favourite weeds! This AABR sponsored workshop on flame weeders took place on a beautiful sunny afternoon underneath some Turpentines at Artarmon Reserve, Artarmon NSW.

We had a demonstration of a LPG powered flame weeder from Andrew Souter from Willoughby Council and kero flame weeders powered by Ramin Khosravi (North Sydney Council) and Eric Vallis (Terra Australis Regeneration). Kate Muir, the State Manager for Steamwand came along to watch and got roped in to show us how a steam powered weeder works as well.

Andrew was concerned about using glyphosate in the sandy soils of Willoughby so investigated flame weeders for weed removal in these situations. WCC's teams are so impressed they use the flame weeder to help them clear dense infestations of Trad and Ehrharta as well as other weeds that hold masses of seed on them. Although no monitoring has occurred, the team believes that use of the Flame Torch does reduce follow-up, means that regenerators are not working amongst weeds that have previously been sprayed and that some regeneration of FABACEAE species does occur if these seeds are near the surface in the soil seed bank. Flaming also reduces the risk of contact dermatitis or respiratory problems associated with Palm Grass or Pellitory. A reminder that any soil fauna near the surface will be fried and certainly any amphibians or reptiles in the area are in danger also, so please remember to disturb the vegetation enough to frighten fauna away from the site before flaming.

Weed flamers are designed to apply enough heat to the leaf to boil the water content in the cell thus rupturing the cell wall. Ramin's information sheet states that it is not necessary to sizzle or flame the plant but just to pass low over the plant, with a scythe-like motion, and sear it. Actually burning the vegetation may stimulate underground stems to vigorously resprout (this works really well with Turkey Rhubarb). Flaming works especially well on young herbaceous seedlings; with perennials only a few centimetres high the root system is killed. With grasses, it is a different story as most are adapted to survive fire and the sheath actually protects the crown from damage, so grasses are killed more effectively only when they are a few centimetres high; older plants will definitely need follow-up, as the crown is still viable. Needless to say, experimentation is necessary because the reactions of plants will be different, as well as the environmental conditions at the site and on the day. It is also paramount that two or possibly three applications of flame are necessary for a complete "kill".

Cooking equipment:

The Jet Dragon Flame Torch 4 does need some extra equipment. WCC got a purpose built rack to hold the LPG cylinder in place. 45 kg cylinders are recommended as these do not frost up so readily and the pressure is greater as well as being able to use them for a longer period of time. However, because they are so difficult to lift when full, the teams use 18kg cylinders. There

are wheels on the base of the rack and tines at the front end to hold the rack in place while you are using it. A gas regulator and hose needs to be connected to the cylinder, gas turned on, and then the attachments are sprayed with soapy water to check for leaks (soapy water will bubble if a leak is present). Fire prevention knapsacks and watering cans are required to put out flames or embers after the weeds are flamed. Leather riggers gloves and goggles and flame retardant clothing and boots are recommended PPE. WCC has also designed a metal container to place over plants to be protected while flaming. A square shovel is also a helpful barrier as well as being useful to turn over hot or burning logs so they can be drenched. Two people are required when flaming as the equipment is heavy and can be cumbersome and the extra person is required to be nearby to apply water so flames don't escape the immediate area. Willoughby also puts up "Flame Weeding in Progress" signs and the team also carries a mobile phone or two-way radio. A spark ignition gun is required to light the wand. The MSDS for LPG is also on site and should be read before using the torch. Andrew has developed a training course, pre-start and daily checklists and an operating procedure. Competency of crewmembers in using the Flame Torch is assessed by practical and written tests.

Ramin described the Sheen Flame Gun X300 as being like a pressurized drip torch. This flamer is much smaller and easier to manipulate. There is a small cylinder which holds the Kerosene, the pressure pump handle which pressurises the fuel, a handle at one end for the operator to direct the flame and the flame wand at the other, all in a light and easy to hold piece of equipment. The flame gun takes about 2-3 minutes to warm up and is ready to go when you hear it whoosh. Unfortunately Ramin's flamer had a blockage so Eric came to the rescue with his flamer. Compared to the Jet Dragon Torch, the kero flamer did not seem as powerful, but the easiness in handling is much more evident. Also, it is not so easy to cut off the flame; one must shut off the fuel then hold the torch vertically upward so the kero leaves the wand.

Permission to flame is not required from the DEC, however, it is highly recommended to let the local fire brigade know where you will be working in case concerned residents or passers-by ring the brigade with a false alarm. Other important considerations were to always have the wind behind you and to never work on windy or fire hazard days. The flamer is most effective in dry to slightly damp vegetation.

It is also recommended not to burn in very hot/dry conditions as there is always the possibility of starting an out-of control fire. On the demonstration day the ground was damp and the temperature was 16-17 degrees C and the flames did not spread at all.

Ingredients

(Andrew's recipe)

Mother of Millions and Cobblers Pegs Great on plants that hold the seed on them. Treat mature Bidens in 1 min 5 sec /m2

Turkey Rhubarb Flame the seed then the vegetation. After several treatments it seems that the stem tubers disconnect from the rhizome system and the disconnected tubers then resprout – use a follow-up spray to kill the tubers. A thick infestation takes 45 sec/m2 to flame

Trad Clears a dense infestation down to manageable levels (20-30cm depth takes 1.5min/m2; depth 5-10cm takes 1.25min/m2). Flame until parts of the stalks turn brown. Requires 2 to 3 applications to completely starve plant, follow-up hand weeding still required. Used one cylinder in approximately 6 hours.

Palm Grass Decreases contact with silicon hairs; needs follow-up. Took 2 min 5 sec to treat a 1.5x2.4 m area or about 1min/m2.

Pellitory Can avoid physical contact by flaming, needs follow-up several times; used one cylinder in approximately 4 hours

Ehrharta Flames seed but needs follow-up for large plants, will stimulate seed bank so follow-up required on seedlings; takes 55 sec/m2 to flame

Cape Ivy Takes 35sec/m2

These times seem really impressive. Let's get some more monitoring figures on this technique so we can make a scientific decision about the effectiveness of this tool. It will also be really interesting to find out how much time and money can be saved by using Weed Flamers.

The Steamwand

Kate Muir came to the demo as a bystander but she was encouraged to give us a demonstration of the Steamwand that she uses on the contract with Leichhardt Council. This diesel fired burner sits on the back of a Ute with two 200L water tanks. The steam produced is useful for treating weeds along footpaths, edges of bushland adjacent to parks, along fence lines and road verges and edges of reservoirs where herbicide use is restricted. Steam works on the same principles as the Flame Weeders and is also a useful tool in breaking the herbicide cycle. It is particularly effective against Pellitory. While the Steamwand is too large to use within urban bushland, it would be a useful tool to use in clearing road verges of weeds before planting and on bushland/parkland boundaries to keep Kikuyu, Buffalo Grass or *Salpichroa origanifolia* from continually invading into the bush. The large head can cover a swathe of ~50cm and there is a narrow nozzle fitting for other situations. It would also be extremely useful for Councils to use on footpath and curbing weed control rather than using herbicide. Needless to say, in rural areas the equipment just needs to be loaded onto a ute or on the back of a tractor to treat fence lines or cropping aisles. The brochure states "Steamwand was more efficient & cost effective than hand weeding, in some cases over 200% faster and offering savings of up to 50%.

**Chris Melrose,
AABR Committee**

Acknowledgements: Thanks to all who attended and especially to Andrew, Ramin, Eric and Kate for the demonstrations and to Alex de Bono for the camera work.



Sonny Armstrong
and Paul
Marynissen of
Hornsby Council
cooking trad with
a gas weedburner
at Beecroft (a few
weeks before the
workshop). Photo:
Virginia Bear

Events and Conferences

Date	Title / Details	Venue	Organiser	Contact
February 21 1:00pm to 4:00pm	Walk and talk. Surveying and assessment of reserves for fauna. Presenter: Arthur White	Field of Mars, Ryde, Sydney	AABR	RSVP essential - Chris Melrose by February 16 9438-3635 or 0407 705 140
March 14-15	Workshop: Rehabilitation and Management of Disturbed Native Vegetation. A mix of presentations by experienced rehabilitation practitioners and visits to selected field sites. Themes include: • The ecological principles essential to planning a rehabilitation project. • Understanding the task (the goal for the site, planning, resources, assessing site and vegetation condition, issues such as soil health and soil symbionts, provenance, riparian vegetation, impacts on waterways, monitoring and ongoing management, local issues). • Applying ecological principles to rehabilitation projects (case studies, site visits, demonstration and trialling of techniques).	Coffs Harbour NSW	Australian Network for Plant Conservation	www.anpc.asn.au Ph: 02 6250 9509 Fax 02 6250 9528
April 12-14 Latest registration March 17	Symposium: Biology and Conservation of Australasian Bats. Aims to document the status of research and conservation management. Includes spoken papers, poster sessions, workshops and short field trips. Demonstration of mist netting and field techniques for flying-foxes. Monitoring micro-bats using thermal imaging and videoing techniques	Australian Museum, Sydney Field Sites Sydney Olympic Park, Royal Botanic Garden	Royal Zoological Society of New South Wales and the Australasian Bat Society	Registration: PO Box 20 Mosman NSW 2088 Phone/Fax: 02 9969 7336 office@rzsnsw.org.au General: Peggy Eby peby@ozemail.com.au 02 9387 6134 or Brad Law 02 9872 0162 bradl@sf.nsw.gov.au
April 17-19	ANPC National Forum: What lies beneath? The role of soil biota in the health and rehabilitation of native vegetation. latest research outcomes on the role of soil organisms in ecosystem function and native vegetation rehabilitation. Focus on hidden and often-overlooked flora: mosses, liverworts, algae, fungi and lichens. - the diversity of soil biota and their roles in ecosystem function and native vegetation rehabilitation - workshops, panels and discussions - identification sessions on fungi, lichens and mosses - field visits demonstrating techniques and practical application.	CSIRO Discovery Centre, Canberra, ACT	Australian Network for Plant Conservation	www.anpc.asn.au Ph: 02 6250 9509 Fax 02 6250 9528
May 4-5	A wildlife Weekend. Tune into the world of the wild at Pittwater YHA when a number of speakers will share their passion for the birds, plants, geology, wallabies, goannas, snakes of the Ku-ring-gai Chase National Park. Includes: talks, walks, 2 breakfasts and evening meal on Sat. night. Cost: YHA members: \$95 per person/share Others \$105 per person/double	Pittwater YHA, Sydney	Pittwater YHA,	Book at any YHA or contact Pittwater YHA direct 9999 5748 (8-11am. 5-8pm) pittwater@yhansw.org.au
July 10-12,	Conference The Biodiversity Extinction Crisis-A Pacific Response. Identifies major problems for biodiversity conservation in our region, existing and potential solutions and links to the global biodiversity initiatives. Real opportunities can be found in the nexus between conservation science and policy-makers, managers and the community.	Univeristy of NSW, Sydney	The Australasian section of the Society for Conservation Biology (SCB-A)	www.biodiversity2007.com. Ph: 02 9290 3366 Fax: 02 9290 2444
September 17-21	9th International Conference on the Ecology and Management of Alien Plant Invasions (EMAPI9)	Hyatt Regency Perth		www.congresswest.com.au

note: we have a new address

AABR

was established in 1986 out of concern for the continuing survival and integrity of bushland and its dependent fauna in or near bushland areas, and seeks new members and friends for promoting good work practices in natural areas. The Association's aim is to foster and encourage sound ecological practices of bushland management by qualified people, and to promote the study and practice of Bush Regeneration.

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AABR Newsletter Subscription (Open to all interested people) **\$20:00**
AABR Membership (Open to appropriately qualified & experienced bush regenerators) **\$25:00**
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Newsletter contributions are welcome, contact Virginia Bear newsletter@aabr.org.au or phone 0408 468 442