Ecoplan NEWS

Launch of Bushland Weeds Manual

March 5 will see the launch of the weeds manual "Bushland Weeds - a Practical Guide to their Management", with case studies from the Swan Coastal Plain and beyond.

The manual is the cumulation of the Environmental Weeds Action Network project undertaken by Kate Brown and Kris Brooks. The project was funded by the itural Heritage Trust and support for the production of the manual has come from the Co-operative Research Centre for Australian Weed Management.

"It is very satisfying to see such a significant and practical contribution from this important work," said project manager Margo O'Byrne.

"Kate and Kris have worked tirelessly to undertake the trials and collect the information necessary to understand how particular weeds are spreading and how they may be managed at particular bushland sites. The manual is a tribute to their dedication to the task, good understanding of science and their willingness to work hard," Margo said.

The manual is beautifully illustrated with line drawings by Libby Sandiford and many 'on site' photos. There are detailed case studies from all the sites - Shenton Bushland, kton Street Wetlands, Blue Gum Lake serve, Talbot Road Reserve, Gingin Brook and Quairading Nature Reserve.

"The manual is a welcome replacement for 'Managing Perth's Bushland' said Bob Dixon, of the Botanic Gardens and Parks Authority and member of the project management team.

"The knowledge, skills and costings, in terms of hours required to do the job, and potential damage of hand weeding as well as herbicide use, for controlling environmental weeds has never been attempted before in so many ecosystems.

"Using six sites as examples will enable land managers working in different areas to confidently engage themselves in controlling environmental weeds. Based on networking with professionals, volunteers and 'correct scientific practices' many of the case studies bring a wealth of new knowledge," Bob said.

The manual provides the reader with the basic knowledge and the framework needed



Kris Brooks and Richard Diggins at Gingin Brook.

to effectively manage the weeds in his or her own bushland.

"In the real world of managing remnant vegetation there is a dearth of knowledge," said Bob Dixon.

"This manual, culminates four years of science-based, 'on ground' knowledge, capturing the experience of volunteers working in their patch of bushland.

"The result has substantially increased our knowledge of environmental weed control. Environmental weed control is the key to successful restoration projects as well as managing intact bushland, while failure to control weeds leads to continuing degradation of natural ecosystems," Bob said.

Detailed Weed Information

Individual chapters of the manual look at the biology of each weed group and how it relates to dispersal, spread, control and management. Case studies examine the control of certain species at particular sites and discuss the management approach taken. They often describe the setup of trials and monitoring programs. Each weed group has a corresponding table containing a summary of information, gathered from a wide range of sources, on the biology and control of weeds occurring in bushland. The list is based on 'A Checklist of the naturalised vascular pants of Western Australia' (Keighery 1999) and includes species that can have an impact on biodiversity and hamper restoration and regeneration efforts. Finally there are chapters on how to map weed populations in urban bushland, an integral part of weed management and on the issues arising from the use of herbicides in bushland.

"When we began the project it was clear that people working to protect bushland often had problems setting priorities and developing control and management strategies for weeds, at their particular sites," project coordinator, Kate Brown, said.

"The manual highlights the need for State and local government authorities to allocate more resources for technically skilled people working on the ground.

"This way, environmental weed management can be undertaken within an appropriate framework and technical support given to community volunteers. They are the ones who carry out much of the bush regeneration and environmental weed management at present," Kate said.

The Environmental Weeds Action Network will launch the manual at the Arthritis Centre, opposite Shenton Bushland on Wednesday 5 March 2003. This will be preceded by a workshop on the manual and its use. Other workshops will follow at Bridgetown on Friday March 7 and Albany on 11 March. For further information or to register, contact Sue Dempster on 9275 3404 ewan_inc@hotmail.com

The manual retails for \$35 (plus GST) and copies are available from the Wildflower Society of WA.



2002 has been a year of change for Ecoplan, the most notable change being the move to the Department of Conservation and Land

Management. This has taken place with a minimum of disruption and thanks for this needs to go to Bridget Hyder-Griffiths who was in the job during the change over period, and to the staff from the Department for their willingness to take on the tasks associated with Ecoplan. Thanks in particular to all the willing helpers in Wildlife Branch who beaver away to get this newsletter posted out to you on time.



The Skills for Nature Conservation Program has gone from strength to strength, despite undergoing significant staff

changes in all agencies. Thanks to Bronwyn Ryan (previously from the Swan Catchment Centre) for her ongoing dedication to the program over the years, and to Marion Burchell and Kathryn Clarkson who have followed in Bronwyn's footsteps. Thanks also to other staff at the Swan Catchment Centre, especially Alison Nesbit who takes all the bookings for the courses. A special thanks to Alice Bak from Greening Australia WA whose dedication and enthusiasm supported the program for most of the year until she took up a new position with City of Gosnells. Thank you Alice, we wish you all the best in your new position and appreciate your enormous contribution to the program. Other staff at Greening Australia WA have stepped in to take over and once again managed to keep things running smoothly. Thanks in particular to Rebecca Miller and Louise Hardie. Our evaluation of the program has given us some important feedback for developing the courses in the coming year. Thanks to all who took part in the recent focus groups, your feedback was very much appreciated. Of course we would not be able to run a program like Skills for Nature without the ongoing support of our wonderful speakers

Autumn Ecoplan News

Forward your news, activities and regional reports for the Autumn Ecoplan News by 1 March 2003. Please keep your regional reports under 250 words and articles as brief as possible. Send us your photos! Fax, e-mail or write to Margo (see Ecoplan contacts panel on this page).

Thanks to all contributors.

Newsletter compiled and edited by Colma Keating.

and presenters - many of whom give willingly of their time and expertise. Many thanks to all of you. We look forward to a full and varied program in 2003 which we hope will meet the needs of all involved in community conservation of bushland, wetlands and waterways.



Despite not obtaining corporate sponsorship this year, the Ecoplan/Conservation Volunteers Australia Bushland Care days have

managed to support ten community groups in their efforts to gain more support for their local bushland. More than 500 people attended the Bushland Care Days and as well at the Hovea day, there were and extra group of 130 scouts who had a task day alongside ours. The logistics of getting all these volunteers (more than 200 at Hovea and more than 160 at Bold Park) registered and gainfully engaged is a credit to all the group co-ordinators. What a fantastic effort for the bushland. Thanks to the program partner, Conservation Volunteers Australia, who have put a team on the ground for each of the days. Thanks in particular to Conrad Slee. the star team leader for his ongoing and dedicated effort, and in particular to the regular volunteers, Brian, Lois, Pam and lanine, as well as the many others who support the program. At this stage, we have not been successful in gaining sponsorship for the 2003 Bushland Care Days program, so the future of the program is yet to be determined.



The production of Ecoplan News has continued this year and we trust that the information provided continues to be relevant to our

readers. Thanks to Colma Keating for her dedication to the task of collecting and writing information, to Alison for the great layout and to all who support our effort with contributions. Thanks in particular to those who have contributed to Econotes. We have changed the format of the What's On page to reflect the type of activities. We hope this will make for easier reading. Contributions are now sought via the e-mail and in 2003 we hope to put the newsletter onto the Department of Conservation and Land Management web page. Your stories and contributions to the newsletter are what make it a vibrant and useful publication, please keep them coming.

Summer is the time when many community conservation groups take a well deserved rest, re-charge the batteries and plan for the coming year. Thanks for your contributions this year and all the very best for the year to come.

Margo O'Byrne

Ecoplan Coordinator, Department of Conservation and Land Management

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'Ecoplan News is a quarterly newsletter of Ecoplan, a Department of Conservation and Land Management program to support community involvement in bushland conservation'.

Celebrating 2002 efforts





About 50 people were treated to a BBQ and a lively learning experience by the Skills for Nature Conservation (SFNC) initiative when the Swan Catchment Centre, Ecoplan and Greening Australia WA Bushcare Support combined to celebrate the most recent annual efforts of volunteers and supporters. A thanks was extended to the many participants and presenters of the 2002 SFNC workshop and seminar series as well as bushland care day volunteers. The venue was the Waaliti Environmental Technology Centre at Murdoch University, where in between refreshments and catching up, guests were treated to a guided exploration of environmental sustainable technologies.

Peter Stuart was an informative and entertaining guide, taking the group willingly through the research and exhibition complex, that is designed to inspire and demonstrate these technologies in a real setting. Here the landscaping considers wind directions, solar paths and water movement. Everything on-site is recycled.



Above: Community members learning about wind generation at ETC, Murdoch University.
Below: An attentive audience next to the pond.
Photos: Margo O'Byrne



Wet and dry composting toilets and vermiculture systems breakdown organic waste and provide fertiliser for the gardens. Solar panels and wind-turbines provide water and power to buildings. Water-efficient measures include greywater recycling systems. Water-wise gardens incorporate constructed wetlands that capture stormwater run-off, purify grey-water, modify the microclimate and attract native fauna. Even landscaping and cooling ponds contribute, as they optimise the thermal performance of buildings!

Although there was so much to explore, it was obvious from the buzz of the crowd as they moved around the complex, questioning and suggesting – that this was interesting stuff and a great way to end a year of caring for the environment. Special thanks to the Natural Heritage Trust, Greening Australia WA, Swan Catchment Centre, Swan Canning Cleanup Program, Water and Rivers Commission, Ecoplan and the Department of Conservation and Land Management for sponsoring this event.

"I really enjoyed the workshop on Saturday – it answered a lot of my questions, and quite inspired me!"

a participant's response at recent Skills for Nature Conservation course. Watch out for the 2003 training calendar.

Condolences

Ecoplan extends
sympathy to the Batt
family and the Piesse
Brook bushland carers on
the sad loss of Vikki Batt.
Ecoplan also extends sympathy to
bush regenerator, David Hancock
and family on the sad loss of their
son in the Bali tragedy.

Conservation champion honoured

Mandurah's best-known conservation champion, the late Len Howard was recently honoured. On behalf of the State Government the Premier, Dr Gallop officially named the Len Howard Conservation Park which adjoins the Peel-Harvey inlet right on Mandurah's doorstep.

It is one of a few Western Australian wetlands recognised as having international significance and protected under the international Ramsar Convention. Dr Gallop also announced that the WA Planning Commission had modified the Peel Region Scheme to include the seasonal wetland informally known as the Erskine or Old Coast Road wetland. Dr Gallop announced that once the acquisition process is completed, the wetland will form part of the Len Howard Conservation Park.

In 1994 Len was also the recipient of the inaugural Bessie Rischbieth Conservation Award, an initiative of the Conservation Council to acknowledge outstanding contributions to conservation in WA.

Are your postal and electronic details correct?

Can you please check the mailing label of this newsletter to ensure we have your correct contact details. Also, if you would like to contribute to Ecoplan News, can we forward a reminder via e-mail? If so, please forward your address details to ecoplan@calm.wa.gov.au.

Next edition

- Update on insurance issues
- Renae Stenhouse's work on the ecology and management of urban native vegetation
- Skills for Nature Conservation program
- 2003 Bushland Care Days near you (if sponsorship is forthcoming)

Environmental commitment and action acknowledged

Two major Award programs recently recognised outstanding commitment and action to improving the environment across community, public and private sectors.

The 2002 Premier's Awards for Excellence in Public Sector Management highlighted and acknowledged leadership, innovation and best management practice that have resulted in better quality services being delivered to the WA community by the public sector. A total of 88 submissions were received, and categories included:

- Sustainable Environment for outstanding performance and achievement in the protection, conservation or enhancement of our natural environment. Awarded to the agency collaboration of the Department of Environmental Protection, Department of Planning and Infrastructure, Water and Rivers Commission and the Department of Conservation and Land Management for the Bush Forever Project 1997-2010.
- Education & Skills Development –
 for outstanding performance and
 achievement in contributing to an
 educated and skilled future for all
 Western Australians. A high
 commendation was awarded to the
 Water and Rivers Commission for the
 River Restoration Training and
 Demonstration Program.
- Innovation for outstanding performance and achievement in the development of projects or initiatives that demonstrate a leap in public sector management or service delivery. A finalist in this category was the Department of Conservation and Land Management for Florabase – WA's online botanical information service.

The 2002 WA Environment Awards were organised on behalf of the Minister for the Environment, the Hon. Dr Judy Edwards by the Keep Australia Beautiful Council (WA), the Department of Environmental Protection and the Water and Rivers Commission in partnership with the Banksia Environmental Foundation, a national non-profit and non-political organisation. There were 14 categories including:

Community Achievement –
demonstrating leadership, commitment
and excellence in the protection of the
WA environment. Awarded to the
Denmark Environment Centre (DEC)

for their Denmark Greening Plan and associated digitised vegetation database, a sophisticated management tool in conserving the area's local environment – in particular, helping regional planners understand the significance of native vegetation.

The DEC also jointly won the overall 2002 WA Environmental Award. Dr Edwards said that a high standard had been achieved in the 119 submissions received from across the State and it was impossible for the judges to choose between the two joint overall winners. The other joint overall winner was St John of God Health Care, Subiaco.

- Government leading by example for leadership in sustainable development. Awarded to the City of Fremantle for commitment to preserving, caring for and improving its total environment. Finalists included the Eastern Metropolitan Regional Council, in part for their work with member Councils and the community in a range of environmental management activities such as bushland care.
- Eco Building for a valuable contribution to the protection of the environment in the design, construction and operation of buildings or dwellings in a commercial, government, urban, rural or other context. Awarded to the Waalitj Environmental Technology Centre Research and Exhibition Complex at Murdoch University.
- Bush, Land and Waterways –
 for outstanding achievement in
 restoring or revegetating degraded
 or contaminated land, and/or the
 conservation/enhancement of our
 catchments and waterways. Awarded
 the Town of Cambridge for Lake
 Monger rehabilitation. Finalists
 included the Noranda Primary School
 and the Dieback Working Group.

The late Dr Luke Pen was posthumously acknowledged as an 'Outstanding Environmental Achiever' in particular for his concept of 'RiverRats' experts to advise on the best ways to fix river problems. There are now more than 300 RiverRats actively involved in river management in WA – and Luke was the inspiration and leader for this group.

Lessons from the national weed conference

by Andrew Thomson

I am grateful to have participated as a community volunteer at the recent National Weeds Conference held in Perth in September thanks to the Department of Conservation and Land Management's sponsorship. It was a marvellous opportunity to network with other community volunteers as well as researchers and field staff, many of whom had much to share about weeds and their management.

Having the written proceedings (refer to Resources, back page for details) from the very beginning was terrific. You could follow each presentation and underline key points or check the diagrams or write some extra notes in the margins.

The posters were most interesting, though disturbingly they showed how much we have come to rely on chemical spray for controlling weeds. It was again reinforced for me that it is most imperative that any spraying needs to be effective because resistance to products such as round-up ® is already being observed. The Environmental Weeds Action Network (EWAN) produced an outstanding poster highlighting what they do. EWAN President Hazel Dempster gave a most interesting talk that included some revealing statistics such as more than 65 per cent of weeds were introduced via horticulture. She also spoke of the work EWAN is doing with the nursery industry to persuade them not to sell plants that can cause weed problems.

I was most impressed with Loretta Bean's presentation. Loretta is from the Eastern Metropolitan Regional Council (EMRC) and highlighted the enormous effort and achievement of volunteers. She informed of the 84 friends groups and seven catchment groups in the EMRC area that have contributed in excess of 2,000 hours of weed control each year. Many of these groups lack formal structure and resources and often it was a small core of 2-3 members who did the hands-on work.

Finally, as the hot and dry weather approaches, remember it is vital that we continue to weed over summer to reduce the risk of bushfires. If you can manage it, early morning is a great time for such activity.

Editor's Note: Congratulations to Andrew Thomson who, by the time this goes to press, will have achieved his yearly target of 1000 volunteer hours weeding various bushlands throughout the urban area. We salute you Andrew!

For additional learning and funding opportunities – refer to the Spring edition of Ecoplan News.

Econotes: Burning Issues

2002 has seen a series of forums focussing on fire and bushland management including:

- Protecting Property and Biodiversity: an approach to fire hazard reduction in our bushland hosted by the Friends of Trigg Bushland
- Fire in South-Western Australian
 Ecosystems: Impacts and Management hosted by the Department of Conservation and Land Management, and
- Burning Issues hosted by the Urban Bushland Council.

These forums have provided an opportunity to listen to informed speakers, debate issues of difference and discuss ways we can work together to reduce the risk of fires in our bushland. With the warmer weather approaching, this Econote continues to build on better communication at the start of the fire season.

Environmental considerations

There has been a good deal of research done and on-site knowledge gained by scientists, community groups and field workers regarding the impacts of fire on bushland. Some has been highlighted in the Ecoplan News cover story for Winter 2002 and in the proceedings from the above-mentioned forums.

A weeds-fire-weeds-fire spiral

An important and disturbing element of fire in bushland is the presence of non-native plants such as veldt grass, wild oats and bromes. These exotic grasses provide a more continuous cover, alter fuel loads and create a spiral effect where grasses encourage the spread of fire, and fire encourages more grass-growth.

Practical considerations

A survey conducted by the Urban Bushland Council showed that the greatest difficulty experienced by community groups was lack of communication – both at the time of the fire and in the follow-up stages. The State Fire and Emergency Services Authority (FESA) is very keen to work with community groups to help prevent and contain fires in bushland. Recent collaborations have highlighted the many practical and simple actions you can take to reduce the risk of a bushfire and/or to limit its impact.





Before a fire

- develop a Fire Response Plan for the bushland. FESA, local government or Department of Conservation and Land Management will need to be involved in putting this plan together and to sign it off. There are a number of these plans in existence which can be used as models.
- keep weeds controlled especially flammable weeds like veldt grass and typha
- slash rather than plough firebreaks to avoid erosion problems just remove trees and retain the rest of the vegetation
- ensure FESA and the land managers have a contact person for each bushland group
- make the FIRE EMERGENCY telephone number (000) accessible – vigilance and prompt reporting of fires is crucial to ensure a quick response and thus minimise the extent of the burning. If you have a notice board on site, include the contact number 000 for reporting fires – so that members of the public know to ring Fire Emergency when a fire breaks out
- record any suspicious behaviour FESA can provide little notebooks of palm-size 'suspicious person or vehicle description prompt' forms. Add them to your conservation toolkit.
- report any suspicious behaviour to Crime Stoppers (1800 333 000) so that persons responsible for fires can be thwarted, (our preference) but otherwise prosecuted.

During a fire

- don't assume the fire has been reported to FIRE EMERGENCY (before you dial – have correct location details – name of bushland, street frontage and closest intersection)
- if you are on the scene early, make accurate written observations for post-fire analysis
- · have your Fire Response Plan with you
- liaise with the Incident Controller at the time of the fire. If the fire is being run by FESA, the person with the lime green helmet is the station officer and is most likely to be in charge of the fire
- follow instructions of the incident controller – they have legal responsibility and are trained to manage the situation.

A Fire Response Plan should be drawn up for each bushland. Do jointly with relevant land managers, FESA and friends group. All partners need a copy. Review these each spring. Paddy Strano from the City of Cockburn demonstrated how effective a simple A3 laminated sheet of vital information can be, such as:

- location of tracks, fences and firebreaks
- recent plantings
- major weed infestations
- · fire history
- · Declared Rare Flora locations
- contact details for the bushland manager, friends group, Local Council and FESA.

Following a fire

- for up to five days after a fire keep checking for re-ignition
- assist with mop-up, debriefing and analysis
- share your learnings with your group and others.

For further information and communication

- FESA for non-emergency call 9323 9000 or visit www.ems.fesa.wa.gov.au/.
- FESA for FIRE EMERGENCY call 000.
- Department of Conservation and Land Management – for Swan Coastal Plain 9405 1222
- Proceedings of Burning Issues workshop or to discuss fire management issues in your area – call the Urban Bushland Council on 9420 7207.
- Proceedings of Fire in South-Western Australian Ecosystems: Impacts and Management Symposium - will be available in early 2003 on the Department of Conservation and Land Management website www.naturebase.net/science/science.html

Including contributions from Renata Zelinova (Urban Bushland Council) and Margo O'Byrne (Ecoplan). Photos courtesy of George Bingham

What's On Summer 2003

2003 heralds a new look WHAT'S ON

Many thanks to the readers and contributors who assisted in re-designing What's On. The new categories bring similar types of activities together in chronological order:

Listen, Look & Learn - talks, walks, seminars.

Get Your Hands Dirty - bushland, river, wetland and coastal hands-on care Develop Your Skills - courses, workshops, training and development Delivering the Message - expos, festivals, conferences and 'theme weeks or days'

Contact details for organisations that provide a series of activities will be provided only once at the bottom of the calendar - with space at a premium this will enable Ecoplan to publicise even more activities.

We encourage and welcome your continued input on these changes, as well as any aspect of Ecoplan News. Opportunities for you to participate! Visitors always welcome. Most activities are FREE!

Listen, Look & Learn

January

10 Friday 7.30 - 9.30 pm

Nightshift walk with Nearer to Nature at John Forrest National Park, Hovea. See and hear the forest at night. Meet native animals up close, and go for a guided spotlighting walk. *

12 Sunday 10 - 11am

Meet the Marsupials with Nearer to Nature at Star Swamp, North Beach. Come face-to-face with Australia's marvellous marsupials and learn about their amazing lives. *

15 Wednesday 10 - 11,30am

Wriggly Reptiles with Nearer to Nature at Cockburn Wetlands Education Centre, Beelian Regional Park. Take the chance to touch and hold these amazing creatures, whilst an expert handler explains how they live. *

19 Sunday 8 - 9am Bird identification walk with Naragebup. O

19 Sunday 9 - 11am

Boomerangs and Bushtucker with Nearer to Nature at Woodman Point Regional Park. Get an insight into traditional Indigenous culture and gain a new appreciation of native plants with a Nyoongar guide. *

22 Wednesday 11am - 12 noon Meet the Marsupials with Nearer to Nature at Star Swamp, North Beach. Come face-to-face with Australia's marvellous marsupials and learn about their amazing lives. *

25 Saturday 8am Guided walk with the Friends of Star Swamp Bushland. Meet at Henderson Centre, Groat Street, North Beach. Call Christine 9447 2983.

February

Date TBC

Contributing to development of the Biodiversity Conservation Act hosted by Conservation Council. Call Cameron Poustie Biodiversity Conservation Officer on 9420 7266.

2 Sunday 6 - 9am

Brekky in the Bush with Nearer to Nature at John Forrest National Park, Hovea. Experience the crisp, cool early mornings in the forest with this guided walk. A hearty cooked breakfast is included! *

4 Tuesday 7.30pm Freeways and disappearing bushland presented by Prof. Philip Jennings (TBC). Hosted by the Urban Bushland Council at the

National Trust Building, 4 Havelock Street, West Perth. Call Andrew on 9450 3424. 9 Sunday 9 - 10am

Guided nature walk with the Friends of Warwick Bushland. Meet at the Bowling & Tennis Club carpark, Lloyd Dve, Warwick. Call Robyn 9342 6840 or Karen 9342 8482.

Propagation and restoration of WA's terrestrial orchids presented by Andrew Batty. Hosted by the Armadale Branch of the Wildflower Society at History House, Jull St, Armadale. Call Judy 9525 5249.

16 Sunday 8 - 9am Bird identification walk with Naragebup. O

21 Friday 7.30pm Corals. Presentation hosted by Kwinana/Rockingham/Mandurah Branch of WA Naturalists' Club. O

22 Saturday 8am Guided walk with Friends of Star Swamp Bushland. Meet at Henderson Centre, Groat Street, North Beach. Call Christine on

19 Sunday 9 - 11am Boomerangs and Bushtucker with Nearer to Nature at Woodman Point Regional Park.

Get an insight into traditional Indigenous culture and gain a new appreciation of native plants with a Nyoongar guide. * 26 Wednesday 7pm Flora and fauna in our local bushland

hosted by Quinns Rocks Environmental Group Gumblossom Community Centre, Tapping Way, Quinns Rocks. Call David on 9305 9575.

27 Thursday

Environment Matters hosted by Conservation Council. City West Lotteries House, 2 Delhi St, West Perth. Call D'Niele on 9420 7266.

March

4 Tuesday 7.30pm

Sharing student's research on kangaroo grazing pressures and rehabilitation (TBC). Hosted by Urban Bushland Council at the National Trust Building, 4 Havelock Street, West Perth. Call Andrew on 9450 3424.

9 Sunday 9 - 10am Guided nature walk with the Friends of Warwick Bushland. Meet at the Bowling & Tennis Club carpark, Lloyd Dve, Warwick. Call Robyn 9342 6840 or Karen 9342 8482

21 Friday 7.30pm Port Kennedy Scientific Park. Presentation hosted by Kwinana/Rockingham/Mandurah Branch of WA Naturalists' Club. O

22 Saturday 8am Guided walk with Friends of Star Swamp Bushland. Meet at Henderson Centre, Groat Street, North Beach. Call Christine 9447 2983.

Get Your Hands Dirty

January

4 Saturday 9am

Maintenance and conservation of the rare Lake Richmond thrombolites, wetland and wildlife with Kwinana/Rockingham/Mandurah Branch Jaturalists' Club.

12 Sunday 8am Bushcare by the sea with Quinns Rocks Environmental Group. Meet cnr Seaham Way and Kinsale Dve, Mindarie. Call David on 9305 9575.

February

1 Saturday 9am

Maintenance and conservation of the rare Lake Richmond thrombolites, wetland and wildlife with Kwinana/Rockingham/Mandurah Branch of WA Naturalists' Club.

9 Sunday 8am

Bushcare with Quinns Rocks Environmental Group. Meet at Kinsale Park, Kinsale Dve, Mindarie. Call David on 9305 9575.

16 Sunday 1-4pm

Field herbarium preparation with the Friends of Warwick Bushland. 10 Aberfoyle Place, Hamersley. Call Robyn 9342 6840 or Karen 9342 8482.

March

1 Saturday 9am Maintenance and conservation of the rare Lake

Richmond thrombolites, wetland and wildlife with Kwinana/Rockingham/Mandurah Branch of WA Naturalists' Club. @

2 Sunday 7.30 - 10am

Join Friends of Warwick Bushland for Clean Up Australia Day - making the effort to Keep Australia Beautiful. Meet at the Bowling & Tennis Club carpark, Lloyd Dve, Warwick Call Robyn 9342 6840 or Karen 9342 8482.

2 Sunday 9am

Join Friends of Baigup Reserve at Hinds Reserve for Clean Up Australia Day - making the effort to Keep Australia Beautiful. Meet near Garratt Road Bridge, Bayswater. Call Harry on 9271 3242.

2 Sunday 9am - 12 noon

Join Friends of Star Swamp Bushland Reserve for Clean Up Australia Day - making the effort to Keep Australia Beautiful. Meet at Henderson Centre, Groat Street, North Beach. Call Christine 9447 2983.

9 March 8am

Bushcare by the sea with Quinns Rocks Environmental Group. Meet cnr Seaham Way and Kinsale Dve, Mindarie. Call David on 9305 9575.

Join Friends of Baigup Reserve at Hinds Reserve for monitoring and seed collecting as well as training in weed control. Remember your safety gear plus water. Sausage Sizzle provided. Meet near Garratt Road Bridge, Bayswater. Call Harry on 9271 3242.

16 Sunday 1-4pm

Field herbarium preparation with the Friends of Warwick Bushland. 10 Aberfoyle Place, Hamersley. Call Robyn 9342 6840 or Karen

Join Friends of Baigup Reserve at Hinds Reserve for weeding and mulching. Remember your safety gear plus water. Meet near Garratt Road Bridge, Bayswater. Call Harry 9271 3242.

Develop Your Skills

January

9 Thursday - 15 Wednesday (weekdays only) Catchments, Corridors and Coasts: Promoting a Landcare Ethic developed and delivered by the Australian Association for Environmental Education Inc (AAEE (WA)). Professional development for environmental educators, local government, tertiary students, TAFE students and community members. Fees \$125 and \$150. Although bookings close in December, late bookings may be accommodated. Call Janette Huston on 9574 6039.

14 Tuesday - 16 Thursday 9am - 3.30pm Seed Collection of West Australian Native Plants with APACE. Includes practical component. Fees \$165. &

February

1 Saturday 9am - 1pm Being safe in the bush - work site safety for bushland volunteers with Bush Skills for the Hills. Call Linda on 9290 6675.

Every Thursday 7pm Plant identification with the Eastern Hills Branch of the Wildflower Society. Octagonal Hall, 52 McGlew Rd, Glen Forrest. Call Jenny 9572 1697

11 Tuesday - 13 Thursday 9am - 3.30pm Seed Collection of West Australian Native Plants with APACE. Includes practical component. Fees \$165. *

March

Date TBA

Coastal Diversity workshop hosted by Coastcare at Garden Island as professional development for community members and teachers. Find out what biodiversity means on the coast in a spectacular coastal environment. Maybe even have tea with a tammar wallaby. Call Cathy Ronalds, Coastcare Facilitator, WA Local Government Assoc. on 9213 2065.

Every Thursday 7pm

Plant identification with the Eastern Hills Branch of the Wildflower Society. Octagonal Hall, 52 McGlew Rd, Glen Forrest. Call Jenny 9572 1697.

Delivering the Message

January

2 Thursday - 8 Wednesday UnderWay 2003 the 24th Biennial Conference of the Australian Speleological Federation at Bunbury. Now incorporating the 3rd Australian Cave History Seminar and the 6th Australian Karst Studies Seminar. For more information contact WA Speleological Group on 9341 7505

10 Friday

Closing date for comments on the draft State Sustainability Strategy. Copies available from the Department of Premier and Cabinet on 9222 9449 or 1800 198 274 or visit www.sustainability.dpc.wa.gov.au.

February

2 Sunday 9 - 11am WORLD WETLAND DAY hosted by Naragebup. Activities include water monitoring demonstration, aquatic invertebrates under microscope and identification of birds, other fauna and wetland plants. (2)

14 Friday - 15 Saturday Sustainability Summit hosted by the Conservation Council. Call D'Niele 9420 7266.

24 Monday - 1 March

Recovery: a decade towards a biodiverse future. 5th Australian Network for Plant Conservation (ANPC) national conference and conservation techniques workshops in the City of Greater Geelong. Contact ANPC on 02 6250 9509 or www.anbg.gov.au/anpc.

25 Tuesday

Business Clean Up Day as part of Clean Up Australia Day. For more information go to www.cleanup.com.au or call Janelle on 9278 0682.

O Naragebup - Rockingham Regional Environment Centre, Safety Bay Rd (opposite Lake Richmond), Peron.

HIGHLIGHTS

World Wetland Day 2 February Clean Up Australia Day 2 March Seaweek 9-16 March

28 Friday

Schools Clean Up Day as part of Clean Up Australia Day. For more information go to www.cleanup.com.au or call Janelle on 9278 0682.

2 Sunday

Be part of Clean Up Australia Day. Can you coordinate a site such as local bushland, park or waterway? The commitment and enthusiasm of site supervisors is essential to the success of this program. For further information on how to participate contact Janelle Booth, Keep Australia Beautiful Council on 9278 0682 or visit www.cleanup.com.au.

8 Saturday

SEAWEEK Teachers Expo 'Exploring the Ocean'. A professional development day for teachers and community members on Rottnest Island. Many organisations come together to help you explore the marine and coastal environment in an educational day packed with activities. Contact Melinda Wild, Rottnest Island Authority on 9372 9762.

9 Sunday - 16 Sunday SEAWEEK. Lots of activities, if you want to be involved contact Coastwest/Coastcare Regional Coordinator Cathy Ronalds at the WA Local Government on 9213 2065 or checkout

16 Sunday

www.mesa.edu.au.

Envirofest 2003 hosted by the City of Melville at Piney Lakes Environmental Education Centre. This year's theme is 'Environmental Lifestyles'. If you know anyone who would be interested in having a stall to promote an environmental product or flog something which is environmentally sustainable, then this is the forum for you! Call Jackie Stansfield, City of Melville on 9364 0283.

Key events in 2003

International Year of Freshwater

Ecoplan/Conservation Volunteers Australia Bushland Care Days for 2003 is dependant on sponsorship. Details of any program will be provided in future

An initiative of Ecoplan, the Swan Catchment Centre (SCC) and Greening Australia WA Bushcare Support, the Skills for Nature Conservation training and development program for . 2003 is being finalised. To receive a copy contact the SCC on 9374 3333.

Perth Flower & Garden Show (April 3-8) with the theme 'our senses' will be held at Perry Lakes Reserve, Floreat. For more information contact the Nursery and Garden Industry Association on 9485 1144 or visit www.niawa.com.au.

The Wildflower Society has a number of key activities planned including the biennial lecture, the annual conference in late June and the spring fling in early September. Remember also to check out the individual branch meetings which always have interesting and practical presentations and workshops. Call the Society 9383 7979 or visit www.ozemail.com.au/~wildflowers.

The Conservation Council is hosting a series of activities in 2003 including bimonthly Environment Matters, a Sustainability Summit, a seminar series focussing on the development of State's Biodiversity Conservation Act and a Future Industry Forum. For more information contact D'Niele on 9420 7266 or visit www.conservationwa.asn.au.

World Environment Day (June 5). For ideas on how to participate and to access community education materials visit the Environment Australia website

Nominations for the 2003 WA Environment Awards close on June 12. Workshops will be held to give more information about the Awards' process and application writing. For more information contact Ceidwen Pengelly, Department of Environmental Protection, Water and Rivers Commission on 9278 0679 or visit www.environ.wa.gov.au/awards/.

Biodiversity Month and Threatened Species Day will again be a focus for September. For more details contact the Threatened Species Network, World Wide Fund for Nature on 9387 6444.

Kings Park Wildflower Festival (September 25-29). Contact the Botanic Gardens & Parks Authority on 9480 3659.

The 2003 State Landcare Conference will be held in Katanning (October 7-10). Contributions are sought on possible themes. Contact Billie Hills on yourland@westnet.com.au.

Weedbuster Week (October 12-19). Contact Sandy Lloyd, Department of Agriculture on 9368 3760 or visit www.weedbusterweek.info.au



conference room, Lotteries House, Victoria St, Bunbury. Outdoor excursions will be on the Saturday following the 2nd Tuesday. Details for these are yet to be finalised. Call Shirley 9791 5915, Gordon

9797 0673 or Olga 9726 3181.

Visitors welcome

the month at 7:30pm at the

For Busselton Naturalists' Club activities confirm details by checking the Busselton Margaret Times or calling Bernie on 9727 2474 (h) or 9752 1949 (w), bmasters@iinet.net.au. Meetings are now held at the Busselton Senior Citizens' Centre Meeting Room, 24 Peel Terrace. Visitors

Leschenault Community Nursery

For more information on how to be involved in the Community Nursery, call Shirley 9791 5915.

These events are forwarded for inclusion in the Swan Catchment Centre's monthly information sheet and Riverlink web site at www.wrc.wa.gov.au/swanavon as well as the Environmental Education Network.

> Please send us your April, May and June events by 1 March 2003.

Learning Opportunities

The Skills for Nature Conservation (Swan Catchment Centre/ Ecoplan/Greening Australia WA Bushcare Support) seminar and workshop series continues to provide free information sharing and training for bushland and wetland carers. Contact the Swan Catchment Centre on 9374 3309.

Apace run a series of training and development courses including bush regeneration, plant propagation and seed collection. For more information call 9336 1262.

The Eastern Hills Management Bush Skills for the Hills program is targeting all those wishing to develop skills appropriate to the hills environment. Contact Loretta Bean on 9479 4808.

Naragebup - Rockingham Regional Environment Centre offers a range of environmental workshops and short courses. Contact Naragebup on 9591 3077.

Ribbons of Blue/Waterwatch have a workshop program for educators, coordinators and volunteer Contact Nicole on 9278 0644.

Perth Metro

Nearer to Nature provides opportunities to learn about the natural environment on the Swan Coastal Plain and the Darling Range. Contact May Carter at the Department of Conservation and Land Management on 9295 2244 or www.naturebase.net

Combine volunteering with learning. Conservation Volunteers Australia (CVA) has a regular program of volunteering opportunities in practical conservation in the Perth metropolitan area. Contact CVA on 9336 6911 or www.conservationvolunteers.com.au

Registration details

APACE Winter House, I Johannah Street, North Fremantle. Call 9136 1262

* Nearer to Nature, Department of Conservation and Land Management. Call 9295 2244. Lots more activities, ask

REGIONAL REPORTS

All groups welcome visitors and new members.

North East Region

Enabling more people to enjoy the bushland by Jan Bant

The Friends of Dianella Bushland held an end of year 'Brunch and Break-up' on Sunday the 10th November. After a walk around the Cottonwood Crescent Bushland opposite Channel 7, ably led by David Pike, we settled down for a sausage sizzle and a good natter. Representatives of the City of Stirling's Natural Areas Department discussed plans for the future maintenance of the Reserve with members from the Friends of Dianella and other groups. The Reserve now has a crushed limestone car park to add to the limestone paths throughout the bush, so it really has become a very accessible urban bushland.

Our meetings will continue through the Christmas and New Year period, but our walks are in recess until early March. A calendar of events for 2003 is now available.

Contact Jan on 9344 2872.

Weeds, weeding and Wanneroo by Alice Stubber

Weeds were the hot topic of conversation in the City of Wanneroo in October. Students from five schools extending from Koondoola in the south to Yanchep in the North joined in National Weedbuster Week activities. Mindarie Primary and Waddington Primary involved the whole school in the project this year, which was a great achievement and a sign that the environment is gaining a great focus in schools.

Friends of Koondoola were gallantly assisted on the weeding days by Midland TAFE Landcare students Denise Little, Steven Waghorn and Nelly Gay. Weedbuster Week gave them a whole new dimension to work experience. Thanks also go to the City of Wanneroo who have again supported this project.

Contact Alice on 9306 3221.

Linking community to bushland by Alice Stubber

Over the last three months *Bush Links* has been getting into the bush doing what it does best – linking the community to their

local bushland. Despite an interesting array of weather conditions including gale force winds, hail, rain and humid 33° temperatures, many community members joined *Bush Links* for guided nature walks and bush care days.

The walks were held in both Kinsale Reserve and Trigonometric Reserve on October 5. Kinsale Reserve is just a stone's throw from the ocean and you really felt you were feeling nature at work. However, the wild weather was soon forgotten as David Pike showed us the many wonders of this coastal heath. Trigonometric Reserve or as the locals call it 'Top of the World Reserve' was close to the clouds on the afternoon of the same day. The elements whistled by as we sought shelter under the wonderful old Tuart trees that are a feature of the reserve. Raindrops put a whole new dimension on the brilliant oranges and reds of the Daviesia and Jacksonia flowers. Our antics were closely scrutinised by a flock of Carnaby's black cockatoos enjoying a breakfast of Dryandra sessilis seeds. They seemed to approve of our work and were undisturbed by our presence.

Both bush care days were also well attended by members of the local community and I now believe we can start our own Salvation Army franchise store if the array of recyclable goods is anything to go by. Kinsale revealed a table, chair, lampshade, vertical blinds and a couple of potted plants!

We welcome your involvement in *Bush Links*. Become part of the data and monitoring collection process, or join a bushwalk to discover these areas or get your hands dirty and do your bit for the environment – don't hesitate to call.

Contact Alice on 9487 0632.

North West Region

Valuing existing bushland by David Wake & Renata Zelinova

The City of Wanneroo is still considering what to do with the Gumblossom Park area and has contracted consultants 'Ecologia' to do an environmental survey. Quinns Rocks Environment Group (QREG) hopes the Council will recognise the value of the bushland and find ways to meet recreation needs such as locating any development on already cleared land and using capacity at other recreation reserves in the vicinity,

without clearing this precious remnant. Although better management is important, the first step should be setting the bush aside for conservation and public enjoyment, then we can work in partnership to look after it. To assist we have provided the results of our survey work.

Building community awareness of environmental issues is very important and QREG has mounted a series of displays focussing on our bushland heritage and local plants including at the City of Wanneroo's community events (Koondoola, Ouinns Rocks and Brighton) and the Lake Neerabup Festival. Colourful photos of wildflowers, fauna and natural landscapes attracted attention and children were kept busy decorating paper jewel beetles. We hope to get funding for a display board, photo enlargement and laminating - if successful it will make the job of spreading the green message easier. Please let us know if you can help with awareness raising activities.

Contact David on 9305 9575 or Renata on 9305 9382.

Central

Changing our watering habits by Andrew Thomson

Are native seedlings watered too often? Are we developing shallow rooted plants that keel over during a heatwave? I now believe that the best time to plant seedlings is the middle of March, provided that the holes at planting time are filled with water, and dead leaves and sticks are placed around each plant as a mulch. I have had excellent results on a trial basis – but, it does take a lot more time.

Some other experiences over past years include the City of South Perth planting seedlings in March with a program for watering them once a month. These plants had six weeks of warm weather to get established before winter commenced. Other seedlings planted in June 2001 in sandy soils along the Kent Street verge in Kensington were watered only three times over summer, resulting in an 85% survival.

Huge quantities of water and a lot of money could be saved if watering was done every six weeks. So often, we do things out of habit. More people need to challenge the established practice but need to keep diary records so that we can share this information

REGIONAL REPORTS

more readily. Has anyone else challenged the practice of watering fortnightly on Bassendean sands? [Editor's note: Jan King and the Mount Henry Peninsula Conservation Group shared some of their practices in the Winter 2002 edition of Ecoplan News, including a 75% survival rate after watering with about 500ml per plant on four occasions through summer.]

Contact Andrew on 9450 4324.

Walking from the bush to the beach by Dani Boase-Jelinek

On the first day of Spring, the Friends of Shenton Bushland hosted the inaugural bush-to-beach walk. As it happened, that particular Sunday was cold and windy, with forecasts of thunder and hail. In spite of the weather over 30 people turned up to walk the 6km from Grace-Vaughan House to Perry Lakes for a picnic. We propose to make this an annual walk, extending it from Kings Park through to Bold Park. The local member Colin Barnett wished us well for the walk and indicated his support for the concept of a walk linking Perth to the sea via remnant bushland corridors. We welcome any input from people interested in being part of this project.

We are also experimenting with a new form of interpretive information for the monthly walks. Instead of pamphlets we are putting little placards along the sides of the paths which we believe will make it easier for visitors to understand which plants are being highlighted. Please come and visit the bushland and see what you think of the new system – your comments will help us to keep improving.

Contact Dani on 9381 3470.

Hills Region

Focussed activity in the Eastern Hills collected by Jenny Johnson

Spring showers (not rain!) have kept winter plantings damp, resulting in excellent growth in most areas. Predictions have indicated that summer rain is likely, so let's keep our fingers crossed. Also as summer approaches, most groups have been attending to fire hazard reduction, ensuring firebreaks are in good order and entry for fire fighting equipment is not restricted.



Spring wattles in Shenton Bushland Photo: Dani Boase-Jelinek

Brookside, Hovea and Jane Brook – Parkerville: Plans are now being put forward to implement the Shire of Mundaring Weed Strategy. Funds have been made available for both Brookside Park and the Hovea Conservation Park and contractors will now work with the community to tackle this huge task. Students from Midland TAFE have recently been toiling away hard surfacing some of the public access points along Jane Brook to protect its banks.

Quarry Reserve: Swan Catchment Urban Landcare Program (SCULP) funds are being utilised to control weeds and replace them with local species, especially along Bugle Tree Creek.

Village Reserves – Parkerville: Activity continues to focus on restoring a heritage rose garden at the Old Parkerville School. The turn of the century school is located on a bushland block which functions as a wildlife corridor between two major conservation reserves.

Clifton Reserve – Chidlow: This large reserve contains Cookes Brook and has been the focus of a rejuvenated friends group. Watsonia and weedy wattles have been sprayed and removed with plans for extensive replanting in 2003. This work is most important to maintain the natural filters along the banks as this brook flows into Lake Leschenaultia, Woorooloo Brook and eventually the Avon and the Swan.

Lion Mill Creek and Rocky Gully – Mt Helena: SCULP funding for 2003 means it will be a very busy year with planning already underway. A skateboard ramp is to be built at the edge of the Lion Mill Reserve (LMR) and the coordinators of LMR are in favour, as the young people in Mt Helena are in need of a recreation spot. Mundaring Shire is funding a low wooden fence to help protect the adjoining bushland plants – though they are probably prickly enough to protect themselves!

Hovea Conservation Park: As part of the Darling Range Regional Park this area has received support from Department of Conservation and Land Management to maintain tracks, provide mulch and to remove hazards. This excellent partnership should ensure the ongoing maintenance of this section of Regional Park.

Falls Park – Hovea: John Blackley, one of the park's earliest champions has been remembered with a grove of eucalypts planted in his honour. The groups continued weeding, dieback control and rubbish removal.

Kensitt Street – Hovea: Blackberries, watsonia and every weed imaginable are being removed and replaced with reeds and rushes.

Contact Jenny on 9295 4467 or Linda on 9290 6666.

Acknowledging outstanding volunteers by a proud John Stanley

To celebrate International Volunteers Day, the Department of Conservation and Land Management held a function at Matilda Bay Restaurant which my wife Linda was invited to attend.

I warned Linda to prepare her speech, but my message was ignored. So you can understand her surprise and delight when she was awarded an Outstanding Services Award certificate for the Darling Range Regional Park area by the Minister for the Environment, Dr Judy Edwards. Having had her 'Annus horribilis' you can imagine Linda's joy at receiving this award on behalf of everybody in the Piesse Brook Volunteers Group. It is also great to see that the work the group has done and Linda's contribution has been recognised by the Department. [Editor's note – Linda is recovering from a severe back injury – we wish her well.]

Contact Brian Sparkes 92933 813



REGIONAL REPORTS

South East Region

Many contributions create a living stream by Michelle Crow & James King

In many urban areas storm water run-off gathers from light-industrial and residential catchments making its way into the river via a series of drains. Redcliffe is no exception and the run-off makes its final journey into the Swan River via a 500m linear open drain – the Coolgardie Main Drain, where it bisects Garvey Park. This drain has been the focal point of the Belmont-Victoria Park Catchment Group (BVPCG) and the City of Belmont with the objective to enhance the habitat value whilst using natural ways to improve the water quality as it moves through a 'living stream'.

In 2000, a \$20,000 Swan Catchment Urban Landcare Program (SCULP) grant gave this project the opportunity to begin this transformation from open drain to living stream. After a year of planning and negotiating, on-ground implementation finally began in April 2002 with over \$10,000 in-kind support from Boral Resources, who provided the machinery and operator to sculpt and batter 200m of banks whilst removing 3,000 cubic metres of material. This has increased the available wetland habitat area by about 6,500m² and created the beginnings of a meandering stream.

This project is testimony to the potential of partnership projects with shared equality between community groups and local government – working together with the enormous generosity of corporate and community volunteers. Some of the groups, individuals and organisation that have made this project happen include: Garvey Park Friends, BVPCG, City of Belmont, Conservation Volunteers Australia, local community, Deloite Consulting, Price Waterhouse Coopers, Swan Canning Cleanup Program (SCCP), Natural Heritage Trust Envirofund, SCULP and Boral Resources.

With ongoing support we are hoping to plant over 25,000 local species in 2003 – during which weed management will be a high priority.

Contact Michelle on 6250 8084.





Corporate Care Day volunteers from Deloite Consulting



Volunteers sampling macro-invertebrates Photos: Michelle Crow

Searching for creative solutions along the Canning by Diane Matthews

As usual the Canning River Residents Environmental Protection Association (CRREPA) has been dealing with a wide range of interesting and sometimes frustrating issues. We continue to represent the views of our community to both local and State governments, and to make very useful contributions to the conservation of our river system. However, unfortunately we have made minimal progress in our aim to protect the foreshore vegetation from trampling by people gaining access to the water, particularly recreational anglers. As a result of previous lobbying for action we were assured that some of the powers vested in the Swan River Trust (SRT) would be transferred, on a trial basis to the Canning City Council (CCC) security staff. This would enable these CCC staff to issue infringement notices for vegetation damage (which is illegal). The CCC would then recoup from SRT the costs for services rendered. We await further developments and in the meantime we will try different strategies.

We are negotiating with the CCC to install information stations or interpretation signs within the foreshore reserve and also Yagan Wetland Reserve. These would provide information on the local flora and fauna.

Contact Diane on 9457 2896.

South West Region

Environment education flying high at Naragebup by Ann Goodale

The Hon. Dr Judy Edwards, Minister for the Environment and Heritage launched the first full-time Environment Education officer position at Naragebup on November 13. The ceremony was sponsored by Rio Tinto Future Fund which also provided the fulltime salary for the new position and was represented by Mr Duncan Price, the Managing Director of Hismelt. Bob Goodale introduced Ms Libby Burgess, the newly appointed education officer - a Naragebup volunteer of four years standing, who had already begun work enthusiastically. Libby brings to the job a keen interest in students, biological science, the environment and sustaining that environment into the future.

The morning was brightened even further by Year 4 and 5 students from Rockingham Beach Primary School who not only painted a delightful banner but also assisted in the release of 120 Monarch butterflies to mark the far-reaching possibilities now achievable from Naragebup. The banner was designed by resident artist and volunteer Eileen Child whilst the butterfly spectacular was donated by Monarch Magic. Everyone felt we were indeed flying upwards and onwards as the butterflies took off into the gardens. The day of the butterflies will be a vivid memory in the history of Naragebup: the day environment education soared.

Contact Naragebup on 9591 3077.



Students helping the Minister, Dr Judy Edwards to release butterflies



Rockingham Beach primary school students painting butterflies. Photos: Nagargebup

Group Profile: Friends of Baigup Reserve

Baigup Wetland fringes the Swan River in Maylands and Bayswater between Garratt Road Bridge and Swan View Terrace. It is a vegetated alluvial plain of about a kilometre in length and half a kilometre at its widest point. Variously know as the 'Swan River Saltmarshes' and 'Garratt Road Reserve' it is part of Bush Forever Site 313 and System Six area M51.

Foreshore vegetation

The Baigup wetland, although degraded, is one of the important fringing vegetation habitats along the Swan and Canning Rivers. The wetland is believed to have originally been a *Melaleuca-Juncus* plant community, with *Casuarina obesa* (Swamp Sheoak) extending along the foreshore and *Eucalyptus rudis* (Flooded Gum) bordering the alluvial plain.

Fire has been a significant historical factor and has played a major role in the decline of the native vegetation. An increase in fire frequency has disadvantaged the *Melaleuca rhaphiophylla* communities while encouraging the exotics to spread.

Nyoongar and European connections

Baigup is an Aboriginal Nyoongar term for rushes and was chosen to recognise the significant stretches of Shore Rush (*Juncus kraussii*) and other rushes which extend along the foreshore near the Garratt Road Bridge. Although the recorded history of the area only goes back to 1830, the existence of numerous freshwater springs and the proximity to the river mean it is almost certain that portions of this area were important places for local Nyoongar families and communities.

With the advent of European settlement came the first commercial market gardens in 1898. Established by Chinese immigrants, these were worked until the 1970s. Since then uses have included housing, passive recreation, nature conservation, an easement for a gas-pipeline and dumping of infill. Today, Baigup is gradually regaining its former beauty and habitat value.

Dedicated action

When Bayswater Greenwork began the first conservation work in Baigup in the 1980s they faced hectares of bulrushes, pampas grass, paspalum grass and many other environmental weeds. The group managed to make an impact on the ground, but more significantly they helped to raise Baigup's profile within the Ministry for Planning and the City of Bayswater and in 1994 the



Volunteers getting their hands dirty for Baigup. Photo: Harry Bastow

Western Australian Planning Commission injected \$800,000 into Baigup and Hinds Wetlands. It was recognised that Baigup had two major problems that were best addressed by the installation of two artificial lakes in the current Typha and weed communities. 2000 saw the construction of the filtering lake followed by the second lake which provided some natural breeding habitat. Then, in 2002 Salvinia was highly active in the filtering lake and the Friends of Baigup Reserve (FoBR) succeeded in the difficult task of removing this invasive weed.

"Another mammoth task that we are part way through is the planting of 407,000 seedlings in Baigup and Hinds Reserves ", explained Harry Bastow, the FoBR President. "We have had the support of many volunteer groups and this year's Bushland Care Day with Ecoplan and Conservation Volunteers Australia injected expertise, skills and a very enthusiastic labour content to Baigup — with lasting benefits."

Highlights

"Persistence, hard work, staying in-touch with the community and joint projects have resulted in many successes", explained Harry. With obvious pride he then went on to explain "Highlights have included:

- a one-off administration levy provided by the City of Bayswater for local environmental friends groups
- an environment coordinator role established within the City – ably filled by Sarah Dawson
- the emergence of the Environment Liaison Advisory Group which provides advice to the City."



"Another highlight is the way we learn and share information", said Harry. "We encourage members to improve their skills through the many courses around, and then to share their learnings with the rest of us. This way we are continually building our skills."

Future focus

FoBR have a great program planned for 2003 and beyond. Activities include landscaping Hinds Reserve with a woodchip path and 7,000 plants, finalising a 'friends manual' and a 'birds booklet' for City of Bayswater residents and groups as well as strengthening ongoing links with the City of Bayswater, other local friends groups and organisations that support community environmental groups.

Rousing words

"Don't give up!" is the determined advice of Harry Bastow. "Things will change if you keep putting the effort in".

Contacts

Harry Bastow on 9271 3242 and Muriel Bassanelli on 9271 9148.

Resources

Focussing on weeds in addition to the new publication Bushland Weeds – a Practical Guide to their Management (see cover story) there are a number of other recent and practical publications focussing on weeds, their management and control.

- Southern Weeds and their control designed and developed by John Moore (Department of Agriculture) and Judy Wheeler (Department of Conservation and Land Management) the emphasis is on small non-agricultural situations where control of small infestations may prevent a much larger problem in the future. This booklet (glove box size, wire binding, plastic-coated paper) provides easy identification of common weeds and methods of control using cultural, biological and herbicidal control techniques. The weeds are divided into four colour coded groups based on their life form (grasses, herbs, vines/shrubs, trees). Similar native plants are identified to reduce the risk of accidental damage. Funded by the Department of Agriculture (Ag Bulletin No. 4558/02), Natural Heritage Trust, Department of Conservation and Land Management and CRC for Weed Management it is available (\$16.50) from the WA Department of Agriculture 9368 3333 and district offices.
- Proceedings of the 13th Australian Weeds Conference – Weeds "Threats now and for

ever?" held in Perth September 8-13. Published by the Plant Protection Society of WA and edited by Jon Dodd, John Moore and Helen Spafford Jacob. Papers cover: weed management, ecology and economics; weed modelling, invasion and eradication; biological control; biology and genetics; novel techniques; mapping; herbicide resistance; education, training and community links; policy and planning; as well as integrated weed management. Available (\$77 plus postage) from RG & FJ Richardson, PO Box 42, Meredith, Victoria 3333. Phone/fax 03 5286 1533 or e-mail richardson@weedinfo.com.au.

Focussing on native plant identification — a number of field guides and reference books have been developed that update our knowledge about local native plants as well as provide improved classification keys. The following are just a selection and all would make useful additions to any reference library and/or coffee table.

• Field Guide to the Wildflowers of Australia's South West – by Jane Scott and illustrated by Patricia Negus. This field guide grew out of the collection of local native plants from the Margaret River-Augusta area for the Regional Herbarium Project, an initiative of the WA Herbarium. There are 500 plants described and named (most grow

through-out the south-west corner of WA) as well as habitat descriptions and information on the derivation of plant names.

• Field Guide to Wildflowers of the West Coast Hills - by Members of the Darling Range Branch of the Wildflower Society. This practical guide provides an introduction to the plants and flowers of the Darling Scarp and Range in the Kalamunda Shire – the backdrop to Perth. To aid identification it presents the plants in life form categories (eg trees, scramblers, grass-like) with associated classification keys. It also includes a glossary illustrated by Margaret Wilson, many photos by Brian Tullis and a flowering calendar. A summary of the local parks, reserves and walk trails encourages the user into our bushlands to observe wildflowers close-up.

Consulting Citizens: a resource guide developed by the Citizens and Civics Unit (CCU) in the Department of Premier and Cabinet. The guide provides a starting point for consultation, offering guidelines rather than formulas. It is divided in three main sections; preparing for consultation, foundations of effective consultation and outcomes. Available from the CCU on 9222 9888 or electronically from www.ccu.dpc.wa.gov.au.

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