

46 Ecoplan NEWS

Issue 46 Winter 2003

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Urban bushland advisory service announced

Environment and Heritage Minister Dr Judy Edwards recently announced the formation of an *Urban Nature* program to facilitate nature conservation management of urban bushland and wetlands.

Urban Nature, to be run by the Department of Conservation and Land Management, will build on the Department's Ecoplan program, support other established urban bushland conservation groups, and encourage new urban bushland and wetland conservation endeavours.

The growth of community-based activity to help protect urban bushland and wetlands has received a major boost with the creation of an integrated advisory, training and assistance service.

"We want to facilitate the involvement of as many people as possible in nature conservation, because preserving our State's diversity is something that relies on strong partnerships across the community," Dr Edwards said.

"The Government wants to encourage and assist private landowners to manage their urban bushland and wetland areas effectively for nature conservation.

"This is the main reason for establishing *Urban Nature*. We also want to be able to give more support and training to other local and State government land owners seeking to maximise the conservation value of their land holdings in the metropolitan area."

Dr Edwards said the Government had allocated a total of \$230,000 for *Urban Nature* in the 2003-04 budget. This included \$100,000 for new initiatives, \$70,000 for existing Ecoplan projects and \$60,000 through the Department of Planning and Infrastructure for projects currently running under Bush Forever.



Urban Nature will build on existing programs for skilling people in urban bushland management. John Dell and participants of recent Skills for Nature Conservation workshop at Cockburn Wetlands Environment Centre. (Photo Abe Francis)

The program, which will focus on the metropolitan area, will have three full-time staff and will also network with existing programs within the Department of Conservation and Land Management, such as *Land for Wildlife* and the Roadside Conservation Committee. There will be strong links built with other agency programs such as the Bush Forever, local government bushland managers and community groups focussing on bushland conservation. It will also fulfil the commitment to establish a Bush Forever Management Advisory Service.

It will be based in the Department's Swan Region headquarters in Kensington.

Dr Edwards said *Urban Nature* would promote best practice and give specific advice on matters such as weed management, vegetation survey and mapping and, to a lesser extent, biological survey, rehabilitation and fire management. Through identifying and promoting best practice in bushland management, assisting land managers to set

targets, providing training and education programs, producing publications and informational material the *Urban Nature* program will help to promote best practice in bushland management.

"It will provide training and education programs, as well as generally raising awareness about urban bushland and wetlands and their biodiversity values," the Minister said.

"*Urban Nature* will have a strong co-ordinating role and a broad client base, including private

landowners and others involved or interested in bushland conservation and management. Although it will have a metropolitan focus, its output will have a broad application.

"It is intended that staff will undertake some work in regional centres, as Ecoplan has done."

Establishing the advisory service fulfils and extends an election commitment of the State Government contained in its

environment policy for the establishment of an urban bushland advisory service, with the incorporation of advice, training and assistance across the breadth of urban nature conservation management issues, including wetlands and remnant bushland.



Quenda nose holes in urban bushland near Roe Swamp, Bibra Lake. (Photo Abe Francis)

For further information about *Urban Nature*, call Margo O'Byrne on 9474 7040.



The busy time of year is fast approaching and hopefully we will have more rain as the season moves on.



This is an exciting time for Ecoplan as it prepares for a new role as part of the Urban Nature program. Urban Nature is the name for the new Urban Bushland Advisory Service (see page 1), which will provide information to bushland managers and complement the bushland management work being carried out by State agencies, local government and community groups. Staff will be appointed to the positions in the near future, and Ecoplan News will keep you updated on the progress of this important service.



Congratulations to the Urban Bushland Council on achieving 10 years of advocating for bushland protection. Ecoplan extends congratulations to all involved.



The Skills for Nature Conservation program has been very well supported, with workshops in Monitoring and Evaluating Bushland Projects, Managing for Unplanned Fires, Bird Surveys, and Understanding Ecosystems. Unfortunately, we had to cancel the Leadership course because of lack of numbers, only to find that some people rang for registration just before the course. Keep in mind that these courses require a lot of coordination, and we need to inform speakers, venue managers and caterers well before the date.



The Aboriginal Cross Cultural Awareness training course planned for early July is booked out, but if you are interested to take part in a future course, please phone the Swan Catchment Centre, as an expressions of interest list is being compiled.



Many thanks to all the speakers who have given so generously of their time and expertise, often at no cost to the program. We continue to get great feedback and much of this is due to the wonderful knowledge of the speakers who support the program. If you would like a copy of the training calendar for the rest of the year, please contact Ecoplan or the Swan Catchment Centre.



I wish to extend thanks to Colma Keating who has worked tirelessly to compile the newsletter over the past two years. Colma is concentrating her efforts on other projects, and we are looking for a new person to compile the newsletter. Thanks also to Jon Kaub, the regional Bushcare Facilitator, who help keep the Ecoplan wheels turning while I was away on leave in May.

Margo O'Byrne

Best wishes

Ecoplan wishes to thank Janice Marshall for her enormous contribution to bushland conservation on the Swan Coastal Plain. Janice is moving away from Perth to take up residence on the south coast in Denmark. Janice has been involved with the Friends of Shenton Bushland, where she was the group convenor for a number of years, and has been strongly involved with the Australian Association of Bush Regenerators where she held a number of executive positions including President. Her skills as an editor are extraordinary and we thank her for the many hours of voluntary work for Ecoplan and many other organizations. We wish you well, Janice in your new life.

Condolences

Ecoplan extends sympathy to Roz Hart, on the sad loss of her husband, and colleague - environmental consultant Ray Hart.



Contacts

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Conservation Council of WA

☎ 9420 7266

Environment Centre of WA

☎ 9225 4103

Greening Australia (WA)

☎ 9335 8933

APACE

☎ 9336 1262

Swan Catchment Centre

Alison Nesbit ☎ 9374 3333

Urban Bushland Council

Renata Zelinova ☎ 9420 7207

Bushcare facilitator

Jon Kaub ☎ 9474 7052

Perth Biodiversity Project (WALGA)

Andrew Del Marco ☎ 9213 2047

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



Spring Ecoplan News

Forward your news, activities and regional reports for the Winter Ecoplan News by 1st September 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 with assistance from Lesley Dean.



Learning opportunities

There is a great range of learning opportunities available – call the following organisers and/or check the What's On centre pages.

The **Skills for Nature Conservation** (Swan Catchment Centre/Ecoplan/Greening Australia (WA)) workshop and seminar series continues to provide information sharing and training for bushland and wetland carers. For a copy of the calendar call the Swan Catchment Centre on 9374 3333.

Challenger TAFE at Murdoch are offering **Certificate II and III in Conservation and Land Management** (upgrade of Certificate in Landcare, with Australia-wide recognition) starting the week of 27 July. They aim to cater for as many people as possible so enrolment is flexible to meet individual student needs. It is also possible to gain TAFE qualifications by having your skills and experience formally recognised. Call Steve Ross on 92298427.

APACE runs a series of training and development courses throughout the year including bush regeneration, plant propagation and seed collection. Call 9336 1262.

The Eastern Hills Management Project is targeting all those wishing to develop skills appropriate for the hills environment through **Bush Skills for the Hills**. Call 9749 4808.

Naragebup – Rockingham Regional Environment Centre offers a range of environmental workshops and seminars. Call 9591 3077.

The Wildflower Society is:

- focussing on the design, construction and care of native gardens through a series of practical **Grow With Us** workshops. Call 9275 3404.
- providing field experience in **bushland plant survey techniques**. Call Bronwen 9381 4062.

Ribbons of Blue/Waterwatch have a workshop program for educators, coordinators and volunteers. Call 9278 0645.

Thanks Colma

This edition of Ecoplan News is the last one compiled by Colma Keating. Ecoplan wishes to thank Colma for her enthusiastic and valuable contribution over the past two years. As well as her extensive networks, gathering information and articles, Colma has contributed professional writing skills and a wealth of organisational support. We wish her well in her future work.

Getting our Act together

By Cameron Poustie, Biodiversity Officer, Conservation Council

The Department of Conservation and Land Management and the Minister for the Environment and Heritage are now considering public comments on the consultation paper for a proposed Biodiversity Conservation Act for WA.



Talbot Road Bushland, Stratton – one of WA's many important areas of biodiversity. (Photo: Margo O'Byrne)

As part of this process, the Department has funded a biodiversity officer position within the Conservation Council to actively encourage and gain community contributions to the development of the Act. A public seminar 'Getting Our Act Together' and two round tables have contributed to a major community submission on the proposed Act.

Although I took issue with some aspects of the consultation paper, in the main it includes very positive proposals, in particular:

- introducing significantly higher fines for the unlawful killing of rare and threatened species;

- the capacity to give legal protection for threatened ecological communities as a unit, rather than just individual species of flora and fauna;
- a provision that expressly requires all government agencies to adhere to the Act (which is not currently the case for fauna); and
- a provision empowering the Minister for the Environment to waive rates, taxes and charges for landholders who have entered into conservation covenants.

For more information call Cameron on 9420 7272 or visit www.conservationwa.asn.au.

Funding opportunities

Community fellowships

Non-academic fellowships sponsored through Land and Water Australia give 'ordinary' people who work within the natural resource management field the opportunity to share their extraordinary actions. Applications close 1/8/03. Call Chris Louis 02 6263 6003, public@lwa.gov.au or visit www.lwa.gov.au.

Swan Catchment Urban Landcare Program (SCULP)

The Swan River Trust is committed to community based, on-ground projects in the Swan-Canning Cleanup Program area. Applications close 16/7/03. Call the Swan Catchment Centre 9374 3333 or visit the www.wrc.wa.gov.au/swanavon.

For details of other funding opportunities refer to Autumn edition of Ecoplan News.

Congratulations



Phylis Robertson who was awarded her Centenary Medal for service to conservation of the environment, participates in an Ecoplan workshop, 2001. (Photo: Bridget Hyder-Griffiths).

About 15,500 Australians, representing a cross section of service to the nation, received **Centenary Medals**, specially struck to mark a 100 years of federation. Many Western Australians received their medal for service to conservation, preservation of the natural environment and/or landcare. Ecoplan News readers included Bernhard Bischoff, Shirley De La Hunty, Susanne Dennings, Chris Ferreira, Bob Goodale, Philip Jennings, Eric McCrum OAM, Frank Mouritz, Barrie Oldfield OAM, Colleen Rankin, Phylis Robertson, Beth Schultz, Eric Singleton, Florence Watson and Barry Wilson.

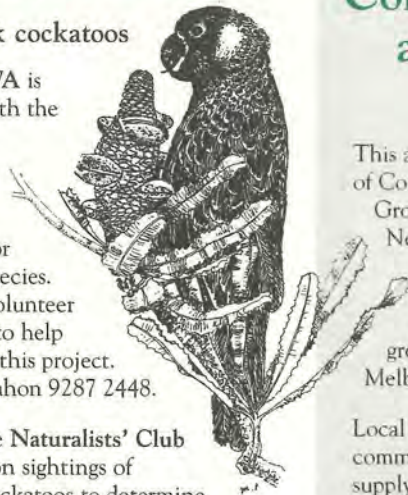
Editors note: Our apologies for any other readers omitted from this already impressive list.

Edwina Davies Ward, colleagues, volunteers and supporters of the **Marine and Coastal Conservation Network** received the Golden Banksia Award 2003 for leadership in protecting coastal and marine environments.

Call for volunteers

Carnaby's black cockatoos

Birds Australia WA is working closely with the Carnaby's Black-Cockatoo Recovery Team to implement recovery actions for this endangered species. More than ever, volunteer support is needed to help with all aspects of this project. Call Leonie McMahon 9287 2448.



John Dell from the Naturalists' Club is collecting data on sightings of Carnaby's black cockatoos to determine their patterns of movement around Perth and invites you to join him as 'spotters and recorders'. The most useful information is date, time, number of cockatoos (or an estimate), direction of flight, what they were doing (e.g. flying, roosting, drinking, feeding including type of tree), weather condition and an estimate of how long they were in the area. Any sightings of crossing the Swan River would be most useful, as river crossings are rarely reported. John is asking that 'spotters' collect this information and send it to him at the end of each month. Contact John on 9222 7000 or john.dell@environ.ea.gov.au.

Possum ecology in the jarrah forest

As part of ongoing research the Department of Conservation and Land Management needs volunteers to assist in a variety of works at Perup Nature Reserve, east of Manjimup. Accommodation in Manjimup and a food subsidy are provided. A minimum commitment of a week (Mon-Fri) is required, and longer is welcome. Call John Rooney 9771 7985.

Ribbons of Blue/Waterwatch WA

Ribbons of Blue in the Swan Region have developed a work experience/volunteer network. Volunteers receive training in Ribbons of Blue/Waterwatch WA monitoring procedures and have the opportunity to run monitoring sessions with school and community. Contact the Swan Regional Coordinators 9374 3333.

Dialogue with the City is an opportunity for people to be involved in planning Perth as it will be in the year 2030 (e.g. natural environment, open space, transport, access to amenities, government services). It will see more than one thousand Western Australians gather in one place to discuss and plan what kind of city they want to live in. An initiative of Planning and Infrastructure Minister Alannah MacTiernan, the workshop will be held in Fremantle on 13 September.

Register your interest with the Dialogue Hotline 1800 137 397 or visit www.dpi.wa.gov.au.

Artwork by Margaret Pieroni (compliments of Keighery & Huston (1994) *Our Wild Plants*, Greening WA, Perth)

Community Bushland Management Groups and their Local Governments – Part 2

by Renae Stenhouse, PhD candidate, University of WA

This article continues on from 'Attributes of Community Bushland Management Groups' in the last edition of *Ecoplan News*. It reviews the relationship between Friends Groups and their local government, based on a questionnaire completed by 76 group members from Perth, Adelaide, Melbourne, Sydney and Brisbane.

Local government authorities (LGAs) commonly help Friends Groups by supplying tools, materials, equipment and plants, providing funding, helping with grant applications and/or giving technical assistance. One council that stood out for its contribution was Logan in Brisbane. Logan City Council provides some different types of assistance such as induction courses, ongoing team leader meetings and 'cross-group activities'. Other progressive assistance from LGAs included supplying equipment and breakfast for an overnight planting; community nursery facilities; and hosting tours to view the approach and results of other volunteer sites. Only three respondents stated that they receive no LGA help.

Seventy percent of respondents felt that they have a positive relationship with their council and 60 per cent of respondents said that LGA help was significant and/or the main assistance they received. Most respondents felt LGA expectations of them and restrictions placed on them (generally health and safety based) were reasonable. However, it was deemed unreasonable when LGAs passed responsibility for management onto volunteer groups – despite the land being vested in the local government authority.

Respondents commonly stated that more funding, staff with more expertise and increased on-ground help with management was required from their LGA. A number of negative comments (made more than once) included: that some councils do not recognise the strong local expertise held by groups; some

councils have conducted inappropriate management; and also that "council expects us (volunteers) to provide cheap labour".

The research also revealed a number of aspects that contribute to a healthy relationship between the Friends Group and the local government authority, including:

- having a responsive LGA;
- good staff in LGA and sympathetic councillors;
- LGA appreciation and respect for the group;
- teamwork between the LGA and the group in achieving common goals;
- strong communication and trust; and
- recognition of each others limitations (e.g. council - financial, volunteers - time).

These are positive steps towards a 'partnership management approach' between community groups and councils. Many Friends Groups have managed local bushland for decades and have a large body of knowledge and expertise in bushland ecology, issues and management. Local government has now recognised its responsibility in managing its bushland, at a national level through the *National Local Government Biodiversity Strategy* (ALGA and BDAC 1999). Councils have the facilities to provide resources and technical assistance in bushland management. Thus, it seems the best way forward is for this dual expertise to be implemented via strong partnerships between Friends Groups and local councils.

Reference: Australian Local Government Association & Biological Diversity Advisory Council (1999) *National Local Government Biodiversity Strategy*, ALGA, Canberra.

This research has been undertaken through a PhD at the University of WA. Thank you to Ecoplan and all questionnaire respondents for making this research possible.

National Weedbuster Week 2003 12-19 October

Now is the time to start planning your participation in *National Weedbuster Week*! To register or to check the *Weedbuster Week* events calendar, log onto www.weedbuster.info.au or contact Sandy Lloyd, Department of Agriculture 9368 3760.

Forward planning is already underway at the Environmental Weeds Action Network and assistance with organising their *Weedbuster event* is invited. Call Sue 9275 3404.



Econotes: Water and plants

By Dr Jim Barrow, retired CSIRO chief research scientist, CSIRO honorary research fellow and contributor to natural resource management learning

Scientists like to make lists.

One thing that soil science undergraduates have to learn is the list of essential elements. If I remember rightly, it starts like this: C, H, O, N, S, P, K... Wait a bit! H? Plants need hydrogen? Of course they do. They get it from water. About the most basic characteristics of plants is that they use water and carbon dioxide to produce carbohydrate – and from there, all of the other organic chemicals they need.

Breathing plants

But why do they need so much water? Basically because they can't avoid losing it to the atmosphere. They must 'breathe' – exchange gasses with the atmosphere. They do this via pores in the leaves called stomata and they can't avoid some water loss in the process.

Of course, it is not as simple as that. Plants have made a virtue of this necessity and the movement of water through the soil to the plant root, then up the stem to the leaves is important in conveying plant nutrients.

Uptake from the soil

Consider how roots take up nutrients. Sites on the surface of the root cells actively transfer nutrients from the 'outside' (the soil solution) to the 'inside' (the cell contents). This uptake decreases the concentration in the soil solution and so nutrients begin to move by diffusion towards the root. This is the 'standard' model for uptake. But not all nutrients follow it.

One exception occurs if the nutrient is present in fairly high concentrations in the soil solution. What can then happen is that the flow of water towards the root sweeps more of the nutrient than the plant wants. So instead of having a low concentration at the root surface, there is a high concentration. And of course, diffusion is then away from the soil surface. This is often the case for calcium. In soils with a lot of lime, the flow of water towards the root may bring so much calcium that precipitation occurs, coating the root in a casing of lime and producing a root fossil.

Special attributes

How come some plants can manage with less water? There are three main strategies.

- One is to **minimise loss**. Plants may bury their stomata (breathing pores) in pits, protect them with felt hairs or waxy coatings, or shut them down in the heat of the day. They may reduce their leaves to scales or hang them vertically to avoid direct sun (e.g. many Eucalypts). Some also use a different photosynthetic pathway that is more efficient.

- Another is to **get more water**. Some plants have 'sinker' roots that plunge straight down to the ground-water. Such plants can flower in the driest part of the year.

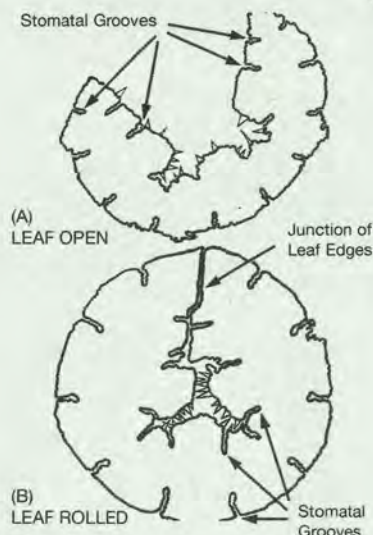
Banksias have both deep roots and surface roots. In the middle of summer when it is usually very dry their deep roots have a supply of water ready for a burst of growth and for flowering when most other native plants are still 'asleep'. So in Perth, Marri (*Eucalyptus calophylla*) and acorn banksia (*Banksia prionotes*), for example, burst into flower providing a rich source of nectar for birds and invertebrates as well as a source of pleasure for us! The Native Christmas Tree (*Nuytsia floribunda*) also flowers in summer but it steals its water from other plants.

- A third is to **tolerate losses**. Plants that evolved in moist climates have leaves that are soft water bags. The leaves don't 'cost' much to grow because they don't have much structure.

Most Australian plants have much tougher leaves. They are reinforced with lignified (strengthening) tissue. They cost more to grow and are kept for longer. If they get dry, they don't wilt. They just shut down. If they get too dry of course, the plant may shed them – and wait for better times when it can activate dormant buds and grow more leaves.

One of the minor problems facing the first settlers in Australia was how to paint these 'strange' trees. The techniques painters had learned to represent European trees simply did not work.

The leaves of some Mulga (*Acacia*) and spinifex (*Triodia*) plants curl up, thus reducing the number of stomata or 'breathing pores' exposed to the environment.



Artwork compliments of Biological Science – the web of life, Australian Academy of Science, Canberra and Sue Patrick (in Powell (1990) *Leaf and Branch*, Department of Conservation and Land Management, Perth).



The stomata or 'breathing pore' of Eucalyptus can be sunken into the leaf surface for added protection.

One could argue the early history of Australian art was the process of actually seeing our trees. Just as we are still learning to appreciate them!

Further information

- Australian National Botanic Gardens www.anbg.gov.au.
- Daubenmire, FR (1974) *Plants and Environment*, John Wiley and Sons, Brisbane.
- Wildflower Society of WA (2003) *Grow With Us* WSWA, Floreat.
- Wildflower Society of WA www.ozemail.com.au/~wildflowers.



What's On Autumn 2003

REGISTRATION/CONTACT DETAILS

for organisations providing a series of activities – look for the symbol. Bookings essential.

- ▲ **Urban Bushland Council** at the National Trust Building, 4 Havelock St, West Perth. Call 9420 7207.
- ✦ **Friends of Koondoola Regional Bushland.** Meet at the display shelter, northeast junction of Koondoola and Burbidge Aves (gate 2). Call Alice 9306 3221.
- ⊕ **Friends of Warwick Bushland.** The Bowling & Tennis Club carpark, Lloyd Dye, Warwick. Call Robyn 9342 6840 or Karen 9342 8482.
- ★ **Friends of Star Swamp Bushland.** Meet at Henderson Environment Centre, Groat St, North Beach. Call Christine 9447 2893.

- ❖ **Skills for Nature Conservation** – A partnership between the Swan Catchment Centre (SCC), Ecoplan and Greening Australia (WA). Call SCC 9374 3333.
- ⊕ **Narabegup** – Rockingham Regional Environment Centre &/or Kwinana/Rockingham/Mandurah Naturalists' Club, Safety Bay Rd (opposite Lake Richmond), Peron. Call Narabegup 9591 3077.
- * **Nearer to Nature**, Department of Conservation and Land Management. Call 9295 2244. Lots more activities, brochures available in all local libraries or visit www.naturebase.net. New, more affordable prices for all activities!
- ⊕ **APACE** 1 Johannah Street, North Fremantle. Call 9336 1262 or visit www.apace.net.au.

August

- 2 Saturday 9am
Maintenance and conservation of the rare Lake Richmond thrombolites, wetland and wildlife with WA Naturalists' Club and Narabegup.
- 2 Saturday 9am-12pm
Bushland care at **Brookside Park**, Parkerville. Call Jenny 9295 4467.
- 3 Sunday 9am-12pm
Bushland care at **Falls Park South**, Hovea. Call Jenny 9295 4467.
- 4 Monday - 8 Friday
Bush regeneration in Lower **Moore River**, Guilderton with Conservation Volunteers Australia. Call CVA 9336 6911.
- 10 Sunday 8-10am
Bush Care by the Beach at **North Mindarie** Foreshore Reserve, Quinns Rocks Environmental Group & Mindarie Coast Care. Cnr Seaham Way & Kinsale Dve, Mindarie. Call Renata 9305 9382.

- 10 Sunday 9am
Planting at **Hinds Reserve** with Friends of Baigup Reserve. Meet near Garratt Rd Bridge, Bayswater. Call Harry 9271 3242.
- 10 Sunday 9am-4pm
Bushland care at Heritage Trail, **Parkerville**. Call Jenny 9295 4467.
- 10 Sunday 9.30am-12pm
Weeding at **Sorrento Beach** (south) Joondalup Community Coast Care Forum. Carpark, north side of Marmion Angling & Aquatic Club, West-Coast Dve, Marmion. Call Mike 9448 1978.
- 16 Saturday 9am
Weeding with Friends of **Periwinkle Bushland**. Meet at the gate opposite Mullaloo Heights Primary School, Gharonia Rd, Mullaloo. Call Dot 9401 3724.
- 16 Saturday 9am-12pm
Bush regeneration with the Friends of **Warwick Bushland**. Meet at the Warwick SHS car park, entry off Erindale Rd. Call Karen 9342 8482.
- 17 Sunday 9am-12pm
Bushland care at **Hovea** Conservation Park, Hovea. Call Herbie 9298 8218.
- 22 Saturday 9am-1pm
Bushcare with Bush Links at **Brighton Bushland Reserve**. Meet at cnr Dunwich Mews & Wiltshire Ent, Butler. Call 9487 0632.

- 30 Saturday 9am-1pm
Bushcare with Bush Links at **Naturaliste Park**. Meet at carpark Silver Sands Dve (cnr Naturaliste Blvd), Iluka. Call 9487 0632.
- 6 Saturday 9am
Maintenance and conservation of the rare **Lake Richmond thrombolites**, wetland and wildlife with WA Naturalists' Club and Narabegup.
- 6 Saturday 9am-12pm
Bushland care at **Brookside Park**, Parkerville. Call Jenny 9295 4467.
- 6 Saturday 9am-1pm
Bushcare with Bush Links at **Chichester Park**. Carpark Trappers Dve, Woodvale. Call 9487 0632.
- 13 Saturday 9.30am-12pm
Weeding at **Sorrento Beach** (south) with Joondalup Community Coast Care Forum. Meet at carpark, north side of Marmion Angling & Aquatic Club, West Coast Dve, Marmion. Call Mike 9448 1978.
- 14 Sunday 8-10am
Bush Care by the Beach at **Mindarie** (Wattle) Park with Quinns Rocks Environmental Group & Mindarie Coast Care. Meet cnr Mindarie Dve & Stars Rd, Quinns Rocks. Call Renata 9305 9382.
- 14 Sunday 9am
Planting rushes and sedges on **Bayswater riverbank** with Friends of Baigup Reserve. Meet near Garratt Rd Bridge, Bayswater. Call Harry 9271 3242.

- 20 Saturday 9am-1pm
Bushcare with Bush Links at **Cadogan Reserve**. Meet at cnr Cadogan St & Sheridan Pl, Kingsley. Call 9487 0632.
- 20 Saturday 1-4pm
Bush regeneration with the Friends of **Warwick Bushland**.
- 21 Sunday 9am-12pm
Bushland care at **Hovea** Conservation Park, Hovea. Call Herbie 9298 8218.

September

- 6 Saturday 9am
Maintenance and conservation of the rare **Lake Richmond thrombolites**, wetland and wildlife with WA Naturalists' Club and Narabegup.
- 6 Saturday 9am-12pm
Bushland care at **Brookside Park**, Parkerville. Call Jenny 9295 4467.
- 6 Saturday 9am-1pm
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Develop Your Skills

- July
1, 8, 15 & 22 Tuesday 5.30pm-8.30pm
Skills for Nature Conservation workshop **Facilitation and Group Skills** presented by Margo O'Byrne, Colma Keating and Bevan Bessen. Learn about the role of the facilitator, managing conflict and facilitation in practice through active learning. Bookings essential. ❖
- 4 Friday & 5 Saturday 10am-4pm
Skills for Nature Conservation workshop **Aboriginal Cultural Awareness and Understanding** presented by Indigenous Heritage Unit, Department of Conservation & Land Management. Bookings essential. ❖
- 9 Wednesday 7.30pm
Best practice management of seed collections hosted by the Australian Association of Bush Regenerators (WA), Kings Park Admin Centre, Fraser Ave. Call Kirsten on 9271 3549.
- 26 Saturday - 16/8 9am-4pm
Introduction to Bush Regeneration Course 1 delivered by APACE. Program run over four Saturdays. ⊕

- August
9 Saturday 1-4pm
Grow With Us - Local Beauties in Pots hosted by the Wildflower Society, Landsdale Farm School. Call Sue 9275 3404.

- 13 Wednesday 7-8.30pm
Local native plants for year-round colour at Narabegup. Bookings essential. ⊕
- 8 Friday
Dreamtime discovery WA Gould League, Hertsman Lake Wildlife Centre. Call 9387 6079.
- 8 Friday 7.30pm
Environmental weeds WA Naturalists' Club, Darling Range Branch. Call Eddie 9293 2270.
- 9 Saturday 8am
Guided nature walk with Friends of Koondoola Regional Bushland. ✦
- 9 Saturday 10-11am
Guided nature walk with the Friends of Warwick Bushland. ⊕

- 13 Wednesday 7-8.30pm
Attracting Birds to Your Garden at Narabegup. Bookings essential. ⊕
- 15 Friday 7.30pm
Frogs of South-West WA hosted by the WA Naturalists' Club at Narabegup. ⊕
- 17 Sunday 9am
Guided nature walk with Bush Links at Naturaliste Park. Carpark Silver Sands Dve (cnr Naturaliste Blvd), Iluka. Call 9487 0632.
- 17 Sunday 1pm
Guided nature walk with Bush Links at Chichester Park. Meet at carpark Trappers Dve, Woodvale. Call 9487 0632.
- 23 Saturday 8am
Guided walk Friends of Star Swamp Bushland. ★
- 26 Tuesday 7.30pm
Restoration of Mt Elisa Landscape by Peter Mooney at the Wildflower Society Northern Suburbs Branch, Henderson Centre, Groat St, North Beach. Call Julie 9306 1278.
- 28 Thursday 7.30pm
Environment Matters The Conservation Council at City West Lotteries House, 2 Delhi Street, West Perth. Urban bushland protection and management. Call D'Niele 9420 7266.

- 2 Tuesday 7.30pm
History of the early Swan river colonisation by Bevan Carter. Hosted by the Urban Bushland Council. ▲
- 4 Thursday 7.50pm
Aboriginal Plant Perspective by Trevor Walley, the Wildflower Society Murdoch Branch, Cockburn Wetlands Education Centre, Lot 387 Hope Rd, Bibra Lake. Call Felicity 9439 3346.
- 7 Sunday 9am
Guided nature walk with Bush Links at Cadogan Reserve. Meet at cnr Cadogan St & Sheridan Pl, Kingsley. Call 9487 0632.
- 7 Sunday 1pm
Guided nature walk with Bush Links at Paloma Park. Meet at cnr Mirrabooka Ave & Aristos Way, Marangaroo. Call 9487 0632.
- 10 Wednesday 7-8.30pm
Attracting Birds to Your Garden at Narabegup. Bookings essential. ⊕
- 12 Friday 7.30pm
Invertebrates in Native Gardens by Robert Powell. Hosted by the WA Naturalists' Club, Darling Range Branch. Call Eddie 9293 2270.
- 13 Saturday 8am
Guided nature walk with Friends of Koondoola Regional Bushland. ✦
- 13 Saturday 10-11am
Guided nature walk with the Friends of Warwick Bushland. ⊕
- 14 Sunday 8.30am
Walk with Friends of Dianella Bushland Reserve carpark, Joy Street. Call Jan 9344 2872.
- 19 Friday 7.30pm
Western Swamp Tortoise Lecture WA Naturalists' Club at Narabegup. ⊕
- 23 Tuesday 8pm
Wildlife Corridors by Graham Caporn and Loretta Bean. Wildflower Society Darling Range Branch, Exhibition Room, Kalamunda Library, cnr Williams & Spring Rds, Kalamunda. Call Carmel 9291 7356.
- 27 Saturday 8am
Guided walk Friends of Star Swamp Bushland. ★

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Guided walk Friends of Star Swamp Bushland. ★

Get Your Hands Dirty

- July
5 Saturday 9am
Maintenance and conservation of the rare **Lake Richmond thrombolites**, wetland and wildlife with WA Naturalists' Club and Narabegup. ⊕
- 5 Saturday 9am-12pm
Bushland care at **Brookside Park**, Parkerville. Call Jenny 9295 4467.
- 6 Sunday 9am
Planting at **Hinds Reserve** with Friends of Baigup Reserve. Meet near Garratt Rd Bridge, Bayswater. Call Harry 9271 3242.
- 13 Sunday 8-10am
Bush Care by the Beach at **Gumblossom Park**. Quinns Rocks Environmental Group & Mindarie Coast Care. Community Centre carpark, Tapping Way, Quinns Rocks. Call Renata 9305 9382.
- 20 Sunday 9am-12pm
Bushland care at **Hovea** Conservation Park, Hovea. Call Herbie 9298 8218.
- 20 Sunday - 22 Tuesday 9am-3pm
Restoration at **Mill Street Stream** with Belmont-Victoria Park Catchment Group. Call Russell 9451 1354.
- 20 Sunday 1-4pm
Bush regeneration with the Friends of **Warwick Bushland**. ⊕

- 2 Saturday 4-6pm
Find the Forest Frogs with Nearer to Nature, Hills Forest Discovery Centre, Mundaring. *
- 3 Sunday 9am
Guided nature walk with Bush Links at Brighton Bushland Reserve. Cnr Dunwich Mews & Wiltshire Ent, Butler. Call 9487 0632.
- 3 Sunday 1pm
Guided nature walk with Bush Links at Cassilda Park. Meet at cnr Gage St & Cassilda Way, Two Rocks. Call 9487 0632.
- 5 Tuesday 7.30pm
Conservation topic hosted by the Urban Bushland Council. ▲
- 6 Wednesday 7-8.30pm
Local native plants for year-round colour at Narabegup. Bookings essential. ⊕
- 8 Friday
Dreamtime discovery WA Gould League, Hertsman Lake Wildlife Centre. Call 9387 6079.
- 8 Friday 7.30pm
Environmental weeds WA Naturalists' Club, Darling Range Branch. Call Eddie 9293 2270.
- 9 Saturday 8am
Guided nature walk with Friends of Koondoola Regional Bushland. ✦
- 9 Saturday 10-11am
Guided nature walk with the Friends of Warwick Bushland. ⊕

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HIGHLIGHTS

- 11th International Fungi & Fibre Symposium 12-18 July
- National Tree Day 27 July
- International Day of Indigenous People 9 August
- Landcare Week 18-24 August
- Biodiversity Month September
- Freshwater Festival 8-10 September

- 16 Saturday 9.30am-12.30pm
Skills for Nature Conservation workshop **Positive Bushland Experiences** presented by Steve Slavin, Lyndon Mutter & Alice Bak at Department of Conservation and Land Management, Kensington. Bookings essential. ❖
- 18 Monday - 21 Thursday 9am-4pm
Introduction to Bush Regeneration Course 2 delivered by APACE. ⊕
- 23 Saturday - 13/9 9am-4pm
Introduction to Bush Regeneration Course 3 delivered by APACE. Program run over four Saturdays. ⊕
- 23 Saturday 2-4pm
WA Herbarium Workshop by Neville Marchant. Hosted by the Wildflower Society Eastern Hills Branch. Call Una 9295 1668. Bookings essential.
- 30 Saturday 9am-3.30pm
Skills for Nature Conservation workshop **Weeding out Weeds - Session 1** presented by Kate Brown, Michael MacShane, Taggart Bushland Services, Rod Randall & John Moore. Weed mapping, setting priorities and scheduling at Piney Lakes Environmental Centre, Winthrop. ❖

- 23 Saturday 2-4pm
WA Herbarium Workshop by Neville Marchant. Hosted by the Wildflower Society Eastern Hills Branch. Call Una 9295 1668. Bookings essential.
- 30 Saturday 9am-3.30pm
Skills for Nature Conservation workshop **Weeding out Weeds - Sessions 2 & 3** presented by Kate Brown, Michael MacShane, Taggart Bushland Services, Rod Randall & John Moore. Weed mapping, setting priorities and scheduling at Piney Lakes Environmental Centre, Winthrop. ❖

- 8 Monday - 11 Thursday 9am-4pm
Introduction to Bush Regeneration Course 4 delivered by APACE. ⊕
- 13 Saturday & 11 October 9am-3.30pm
Skills for Nature Conservation workshop **Weeding out Weeds - Sessions 2 & 3** presented by Kate Brown, Michael MacShane, Taggart Bushland Services, Rod Randall & John Moore. Weed mapping, setting priorities and scheduling at Piney Lakes Environmental Centre, Winthrop. ❖

September

- 2 Wednesday 9am-4pm
Conservation Symposium: **Carnaby's Black-Cockatoo**, hosted by Birds Australia WA and the WA Threatened Species and Communities Unit (Department of Conservation and Land Management). CSIRO Auditorium. Call Cheryl 9293 4958. Bookings essential.
- 12 Saturday - 18 Friday
11th International Fungi & Fibre Symposium at Denmark. Hosted by Fungimap, WA Naturalists' Club & Greenskills. Visit www.greenskills.green.net.au/fungi/.
- 14 Monday - 18 Friday
Water: Histories, Cultures, Ecologies hosted by the Institute of Advanced Studies, Octagon Theatre, UWA. Visit www.ias.uwa.edu.au.
- 18 Friday 7pm
Quiz Night Celebrating 10 Years of Action for Urban Bushland Protection. Hosted by the Urban Bushland Council. Get a table together and join the celebrations. Bookings essential. ▲
- 27 Sunday
National Tree Day event. Call 1300 88 5000 or visit treeday@planetark.com.
- 27 Sunday 9am-12pm
Celebrate **National Tree Day** with a community planting hosted by Belmont-Victoria Park Catchment Group. Call James 9477 7109.

Delivering the Message

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- August
9 Saturday
International Day of Indigenous People. Call United Nations Association of Australia (WA) on 9221 9455.
- 31 Sunday - 6 Saturday
Keep Australia Beautiful Week. Call Deanna at Department of Environment on 9278 0686.

- September
7 Sunday
National Threatened Species Day. Call the Threatened Species Network, World Wide Fund for Nature on 9387 6444.
- 8 Monday - 10 Wednesday
Freshwater Festival WA Gould League, Hertsman Lake Wildlife Centre. Call 9387 6079.
- 13 Saturday
Dialogue with the City – an opportunity to be involved in planning Perth in the year 2030. Call the Dialogue Hotline 1800 137 397 or visit www.dpi.wa.gov.au. Registration essential.
- 14 Sunday 10am-3pm
Rockingham Culture Day at Narabegup. Find out about the fascinating Nyongar, Maori and 'Aussie' cultures in our region. ⊕
- 14 Sunday 9.30 am-4 pm
Spring Fling hosted by the Wildflower Society at Perry House and surrounds, 71 Oceanic Dve, Floreat 9.30am - 4pm. Call the Society 9383 7979 or visit www.wzemail.com.au/~wildflowers.
- 20 Saturday
Bush to Beach Walk. Joint celebration of the 10th Anniversaries of Urban Bushland Council and Friends of Shenton Bushland. Join in a celebratory bushwalk from Shenton Bushland to Bold Park followed by a picnic at Perry Lakes. ▲
- 24 Wednesday - 29 Monday
Kings Park Wildflower Festival. Call Botanic Gardens and Parks Authority 9480 3666.
- 27 Saturday - 4 October
Perth Royal Show. For opportunities to be involved in promoting environmental work call Monica Durcan, Landcare Promotions 9291 8249.

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What's on
Perth Metropolitan Region

Bunbury/Busselton Region

Bunbury Naturalists' Club meetings and natural history talks are held every second Tuesday of the month at 7:30pm at the 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.

For Busselton Naturalists' Club activities confirm details by checking the Busselton Margaret River Times or calling Bernie on 9727 2474 (h) or 9752 1949 (w), bmasters@iinet.net.au. Meetings are now held at the RSL Hall, Causeway Rd, Busselton. Visitors welcome.

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

Geographe Community Landcare Nursery
For more information on how to be involved in the Community Nursery, call Lynne 0409 376 976

August

13 Wednesday 7.30pm
Busselton Nat's talk – A Short History of the Vegetation of WA by Dr Kingsley Dixon, Director Science, Kings Park and Botanic Gardens.

24 Sunday 9am
Busselton Nat's excursion – Meelup to Eagle Bay to Cape Naturaliste to Sugarloaf (13.5 km – easy-moderate walk) with Frank Mouritz. Bus transportation.

September

10 Wednesday 7.30pm
Busselton Nat's talk – Fire in the WA Environment – our Gondwana Vegetation by Dr Ray Willis, Research Scientist.

21 Sunday 9am
Busselton Nat's excursion – Wildflowers of Manea Park, Bunbury and the Wonnerup to Titunup Railway Line with Jeni Jones. Bus transportation.

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.

Advance Notices

- 12-19 October Weebuster Week www.weebuster.info.au.
- 7-10 October State Landcare Conference www.conference.westnet.com.au.

REGIONAL REPORTS

All groups welcome visitors
and new members.

Across the Regions



Ten years ago – Save Shenton Bushland celebration concert was jointly coordinated with the Urban Bushland Council 5/8/93. (Photo: Sue Boland)

Urban Bushland Council celebrations continue

by Renata Zelinova

The tenth anniversary of the Urban Bushland Council (UBC) will be a celebration of the enormous contribution by many individuals to the major urban bushland protection achievements over the past 10 years. The UBC hopes you can join them [Refer What's On] for these celebrations that include:

- UBC Quiz Night (18 July)
- Bush to Beach Walk (20 September) – a joint celebration with the Friends of Shenton Bushland (who also celebrate their 10th Anniversary).

Contact Renata on 9420 7207.

Biodiversity Planning Guidelines

by Andrew Del Marco

Local Government Biodiversity Planning Guidelines are being developed by the Perth Biodiversity Project (PBP) with the purpose of setting out a framework and standard for the production of local biodiversity plans by Perth's local governments.

The guidelines introduce methods that local governments can use to assist in biodiversity conservation by providing regional information and direction, to ensure that each local government is working towards a shared vision. It is expected that these guidelines will help councils to become more strategic in the protection and management of bushland, wetlands and waterways as well as address the requirements of the proposed

Statement of Planning Policy for Urban Bushland and amendments to the Environmental Protection Act relating to clearing permits.

Call PBP on 9213 2047.

North East Region

Merging groups and indigenous opportunities

by Jacqui Otago

Bennett Brook Catchment Group and Bayswater Integrated Catchment Management have merged to become the North East Catchment Committee Incorporated (NECC).

This merger has already pioneered a landcare course specifically designed to cater for the needs of indigenous students. In conjunction with the Midland College of TAFE, the training covers Certificate I and II in Conservation and Land Management, which includes relevant natural resource management skills such as weed control, seed collection, growing plants, preparing an herbarium, working with herbicides and the use and maintenance of machinery.

The 15 week course has provided students with both practical landcare experiences and hands-on training through active participation in rehabilitation works along Bennett Brook. There is very little classroom work and students are assessed in the field as they work.

Contact NECC on 9377 0444.

Editors Note: Congratulations to the NECC for identifying and supporting this important course.



Left: Volunteers laying branch cuttings at Sorrento Beach (south) to help stabilise a blowout. Right: Local residents Ruth and Rob Greenhalgh and other volunteers rehabilitating Sorrento Beach (south) dunes. (Photos: Mike Norman)

Periwinkle surveys

by Dot Lullfitz

After a summer break, our monthly meetings resumed in autumn. On 12 April approximately 15 people enjoyed a stroll through the bush, learning about our native plants and weeds.

Special thanks to our volunteers who have completed the bushland condition mapping. This survey has segmented and identified various areas of our bushland, stating the condition of soil, weeds and native plants. The information provided has assisted the friends in identifying areas that need attention and can guide activities such as our planting and weeding days that are now planned according to this survey.

We were pleased to welcome local school children and Conservation Volunteers Australia (CVA) who joined us for our World Environment Day celebration plantings. The children assisted with 100 plants on 5 June and CVA assisted on the following weekend with the establishment of another 400 plants.

Contact Dot on 9401 3724.

North West Region

Combining specialist and volunteer services

by Mike Norman

The Joondalup Community Coast Care Forum (JCCCF) has been sponsored by Pioneer Construction Materials and the City of Joondalup with support from Coastcare to revegetate the Sorrento Beach (south) dunes and control weed invasion. It is in accord with the Joondalup Coastal Foreshore Natural Areas Management Plan [refer Ecoplan News, Autumn 2003].

In late May, Taggart Bushland Services were contracted to remove weeds in preparation for planting, using a combination of herbicide and hand weeding. Volunteers for our planting day (1 June) were sought through an e-mail

broadcast to all previous helpers, a letter drop to 100 nearby houses and a front page story (with colour photo!) in The Wanneroo Times.

Although the morning dawned grey, wet and windy on this very exposed site, 20 volunteers signed on to plant 2000 seedlings, supplemented by a work crew of eight staff from Taggart Bushland Services. Squalls of rain ensured everyone got wet and the seedlings got a good start! Piles of dead pelargonium weeds were

placed around the seedlings to shelter them from the relentless wind and branch cuttings dumped at the top of the site were dragged down to cover a blowout, created by an old informal path near High Street. Two follow-up weeding events have also been organised. See What's On for details.

Contact Mike on 94481978.

REGIONAL REPORTS

Bushcare by the Beach at Quinns Rocks

by Renata Zelinova

Quinns Rocks Environment Group (QREG) and Mindarie Coast Care are meeting monthly for Bushcare by the Beach, focussing on one of three reserves that were selected as 2003 priorities. Previous activities have included weeding, setting up monitoring quadrats and weed mapping. These days are an excellent opportunity for the community to actively learn about the wonders of our local area as well as the problems facing the bushland through some hands-on care, followed by morning tea. All welcome, refer to What's On for details.

Call Renata on 9305 9382.

Central Region

Friends of Kings Park celebrate 10 years of support!

by Jo Woseen

When the Friends of Kings Park (FOKP) was formed a decade ago, few could have imagined the contribution that this dedicated group (now exceeding 640 members!) would achieve for Kings Park and Botanic Gardens.

The primary aim of FOKP is still to assist the Botanic Gardens and Parks Authority in making Kings Park one of the great parks of the world. With strong support from the Authority the Friends have exceeded all expectations with fundraising efforts, assistance through volunteer groups and representation of the community. Over these years FOKP has contributed more than 3000 person-hours in bushland restoration, raised more than \$280,000 through regular plant sales, contributed \$126,000 to projects and activities including research and attracted grant funding of nearly \$2.5 million from the Lotteries Commission of WA and \$390,000 from the Centenary of Federation.

Contact FOKP on 9480 3643.

In search of technological assistance for Shenton Bushland

by Dani Boase-Jelinek

We are in need of some technological assistance. We would like to explore the application of the Global Positioning System (GPS) in our mapping work and as such wish to borrow a GPS. Also, to ensure our seasonal walk brochures reflect the changes in the bushland, we are looking for someone with a digital camera to assist by taking monthly photos for ongoing updates.

Late summer is our 'quiet' time in the bushland and allows us to plan for the coming

year. This year we have built upon the bushland activity calendar developed by Janice Marshall by creating work sheets tailored to each activity. We hope these will help members and visitors find an activity to do in the bushland that is both interesting to them and helpful for the bushland.



Julie Robert of Bannister Creek Catchment Group shares her enthusiasm for local wetlands at Piney Lakes Reserve during a professional development day jointly hosted with Greening Australia (WA). (Photo: Fiona Marr)

Contact Dani on 9381 3470.

Hills Region

Another season of weeding and planting

collected by Jenny Johnson

Heavy rain in April and May has stirred the bush regenerators in the hills into action! Although the rain was heavy and moisture is only in the top layer of soil many groups have started early planting in the damper areas. If the rain continues until September, we should have a very successful planting season.

Due to the emergence of weeds in May instead of June, weed control has commenced earlier this year as well. *Watsonia* is already half a metre high and ready for spraying.

Heritage Trail – Stoneville to Hovea:

Mundaring Shire is upgrading the surface and signage of this icon trail and volunteers will be enhancing this work by weed control and replanting with local species. It is a huge task and hopefully Green Corps and other agencies will assist us during the winter.

Brookside Park – Parkerville:

TAFE students from Midland Campus have been involved in bank stabilisation, erosion control and planting during May and will continue these activities during the year. Design work for next dry season's erosion control and engineering works should commence soon.

Falls Park – Hovea and Alice Hebb Reserve – Parkerville: Both reserves have reached the weed and spray maintenance stage. It is really great to be able to spend more time enjoying

the reserve now that the initial hard yakka has finished.

Lion Mill Creek and Rocky Gully – Mt Helena: All activities will be based on weeding and planting!

Parkerville Village Reserves Group: The group is working with upper school classes at Parkerville Primary School, identifying weeds within a proposed planting area, removing some species manually and revegetating the area with local species.

Hovea Conservation Park – Hovea: Autumn weather has brought warmth and moisture to produce very strong growth of last year's planting in the wetland. The high survival rate will be consolidated with infill planting and weed control. Exotic wattles are gradually being removed.

Contact Jenny on 9295 4467.

Refocussing the Nature Reserves Preservation Group

by Victoria Laurie

The committee of the Nature Reserves Preservation Group recently held a planning session that focussed on the three future objectives:

- blowing our trumpet a little louder, if only to let more people in the community know we exist – and they can join us;
- concentrating our lobbying efforts on land clearing – including promoting conservation covenants; and
- connecting more with the 40 Friends of Reserve groups in the Shire of Kalamunda.

In between this we will continue to do our hands-on bushland care, as well as wander through the bushland without feeling as if we have to do anything in it – except enjoy it!!

Call Victoria on 9454 4828.

South East Region

Extending environmental education

by Fiona Marr

In May, Bannister Creek Catchment Group and Greening Australia (WA) jointly hosted a professional development workshop Make It Happen – Applying Environmental Education to Your Classroom.

Teachers, parents and gardeners gathered at Piney Lakes Environmental Education Centre for an opportunity to network and explore the wetland and woodlands of the Reserve. Participants also examined a variety of relevant educational resources and programs for practical help in their classrooms and schools.

REGIONAL REPORTS

Call Fiona on 9496 0102.

Storm water drain to living stream

by Marion Cahill

Earthmoving, tree planting, mulching, riffle building, macroinvertebrate sampling, corporate planting days, TAFE students' practical experience...! Just some of the exciting activities at the Coolgardie Drain in Garvey Park, Ascot.

The Storm Water Drain to Living Stream Project commenced in 2002 and represents a highly successful partnership between community (Belmont-Victoria Park Catchment Group) and local government (City of Belmont). Significant contribution is provided from the Swan-Canning CleanUp Program, BORAL Resources Ltd, Conservation Volunteers Australia, Swan Catchment Urban Landcare Program and Water and Rivers Commission (WRC).

Phase I, at the lower end of the Coolgardie Drain was completed in 2002, with Phase II being conducted this year at the upper end. A riffle construction workshop was held in May, resulting in a freshwater upstream habitat being separated from the tidally-influenced downstream zone. The limestone riffle was hand constructed by participants, closely supervised by the WRC River restoration team.

Contact Marion 6250 8084.

Canning bursts her banks

by Grecian Sandwell

In the wake of the autumn storms of 18-19 May when a full moon combined with 100-kilometre winds and heavy rainfall to produce very high tides along much of the Swan and



Contrast in Canning River water levels on 9 May 2003 (above) and 7 June 2003 (below). (Photos: Gary Matthews & Colma Keating)

Canning Rivers, many Shelley-Rossmoyne locals claimed they had never seen the river level as high in 50 years.

The action of the high tide, wave motion and winds drove organic debris and rubbish up onto the sedges and grassed recreational areas, moved sand and temporarily inundated the reeds along the Canning River. Importantly, the foreshore vegetation protected the river edge. Canning River Residents Environmental Protection Association members took advantage of the delivery of organic debris to repair mulch barriers. These barriers are currently protecting wetland areas, enabling the samphires and other wetland plants to recolonise these important habitats, as well as discouraging mowing around the main sedge beds.

Contact Grecian 9354 9734.

South West Region

Nyoongar sharing by Ann Goodale

A deeper sense of belonging to the environment and without doubt, a broader understanding of our biodiverse flora and fauna is absorbed via a walk, a talk, a sit, a look and a listen with a Nyoongar Culture and Heritage Consultant.

'Cooyar' (the Frog) is now stationed at Naragebup - Rockingham Regional Environment Centre on Wednesdays, Thursdays and Fridays by courtesy of the Department of Conservation and Land Management. Cooyar (Trevor Walley), an expert in local bush lore and early knowledge, takes students (adults and children) into this exciting and meaningful world, which many of us have either forgotten or we never knew - thus deepening our understanding and our feelings for this place where we live.

Contact Naragebup on 9591 3077.

Saltwatch 'Snapshot' in Peel-Kwinana by Thelma Crook

Students and adults were invited to participate in the Ribbons of Blue/Waterwatch WA Saltwatch Snapshot to learn about the effects of salinity on water quality by monitoring electrical conductivity in their local catchment. Bus tours, talks and local and remote location water sampling were some of the activities organised by regional coordinators during this year's Snapshot. Interest generated by the Snapshot has led to

an extension of monitoring activities in the Peel-Kwinana Region.

A direct result of this monitoring is the formation of a community Saltwatch Snapshot to be held at Boddington (19 July, refer What's On) to encourage landowners from across the catchment to sample their water. The community's intention is for this to become a bi-annual event, providing information to individual landowners as well as producing data to aid and encourage onground action.

Contact Thelma 9535 3411.

Unique wetlands in the neighbourhood by Elaine Christy & Jenifer Pommerin

The Kwinana/Rockingham/Mandurah Branch of the WA Naturalists' Club was very fortunate to hear more about our community through a lecture by Dr Vic Semenuik, a renowned world expert on wetlands.



Practical approach to indigenous landcare training a winner. (Photo: Tricia MacShane)

We discovered that within 10 kilometres of a long-established industrial area and literally over the road from suburban housing, is one of the most important cusplate forelands in the world, and the largest in Western Australia. This cusplate foreland, which is a triangular projection of sand into the sea known as

the Becher Suite contains a unique occurrence of wetlands:

- damplands - small seasonally waterlogged basins;
- sumplands - small seasonally inundated basins; and
- lakes - large permanently inundated basins.

The other truly unique and precious feature, is that our local wetlands reveal a mode of wetland formation not found anywhere else in the world. The wetlands begin as a dampland and in time deepen by chemical processes (collapsing when chemical action on the calcareous sand causes sinking to occur) to become deeper holes. They gradually fill up with black organic sands, peaty loams, clay and mud.

The Becher Suite (in which the Port Kennedy Scientific Park is situated) is listed as a Ramsar site and already many of the wetlands have been 'redeveloped' as housing - with their wonderful scientific and habitat value irretrievably lost. This further highlights the importance and value of what remains and we thank the efforts of environmentalists and dedicated scientists and research workers such as Dr Vic Semenuik for their ongoing efforts to highlight their importance.

Contact Jenifer on 9591 3077.

Group Profile : Urban Bushland Council

The Urban Bushland Council (UBC) celebrates 10 years of advocating for bushland protection and management.

Catalysts and first steps

In November 1992, David Wake enlisted the support of Rachel Siewert and the Conservation Council, Mary Gray and the Landscape and Conservation Committee of the National Trust and Jane Blake and the Friends of Ellen Brook, to hold a workshop with concerned groups and individuals to determine a clear path for the retention and improved management of urban bushland.

More than 40 groups were represented, and called for the establishment of a coalition working to protect urban bushland. A steering committee formed, and the UBC was formally launched in Kings Park on 21 March 1993 to focus on the values of bushland, the problems facing its retention and management, and to provide alternative and well-considered solutions.

Ten years on

The enormous contribution by many individuals over these past 10 years has seen the UBC grow as a credible organisation, respected by the community, politicians, agencies, media, conservation movement and the public. In addition to the outstanding efforts of volunteers and dedicated staff, the UBC has attracted supporting funds from the Lotteries Commission, the Environment Minister's Community Conservation Grants and the Natural Heritage Trust.

Credibility and respect

In reflecting on the past 10 years, Mary Gray, an inaugural member of the Council and current vice president found it understandably difficult to single out the organisation's greatest achievement.

"Certainly becoming recognised as a respected and credible voice is high up the list. As such, on behalf of bushland groups and the environment, we have been able to gain access to decision-makers, such that urban bushland issues are given appropriate consideration and action," explained Ms Gray.

David Nunn, Department of Planning and Infrastructure, commended the involvement of the UBC in the process of developing the Draft *Perth's Bushplan* and the final *Bush Forever*, through the Urban Bushland Advisory Group and the Bushplan Reference Group.

"This is a fine example of the representation UBC makes on behalf of urban bushland and its members and continues with their membership of the Bush Forever Advisory Group," explained Mr Nunn.



Weed mapping at Garvey Park with Sandy Lloyd, Department of Agriculture (R), coordinated by Urban Bushland Council. (Photo: Haakon Nielsen, UBC)



Mr Nunn also emphasised that the interface the UBC provides between the community and government agencies to support the management efforts of urban bushland is valuable and can only lead to better management outcomes. "From a Government agency perspective, the UBC provides a good avenue to the community – a task that would be more difficult for us without the Council," elaborated Mr Nunn.

Bushland and fire management

Developing a working relationship with the Fire and Emergency Services Authority (FESA) has also been a significant achievement in Ms Gray's eyes.

Ralph Smith the Community Liaison Officer with FESA agrees. "Regular contact with both the UBC and bushland care groups has enabled FESA to gain valuable knowledge of community understanding and preferences for how our bushland should be managed," explained Mr Smith.

Landmark conferences and forums

Gary Whisson, Manager of Terrestrial Ecosystems in the Department of Environment said the UBC had been instrumental in improving our understanding of how to manage bushland.

"UBC has worked at all levels to achieve this, but I particularly credit it for staging landmark conferences such as *Managing Perth's Bushland*, *Burning our Bushland* and *Burning Issues* that brought great credibility to the community role in bushland

management, as well as produced proceedings that remain key reference documents today," said Mr Whisson.

Much achieved and still in demand

Professor Philip Jennings, a long time contributor to conservation and member of the Wetland Conservation Group, also acknowledges that the UBC has fulfilled its role admirably. "They have many achievements to be proud of. There are many small blocks of bushland that have been saved directly or indirectly by their efforts. Many of these are now well managed by volunteers from the numerous friends groups that they have established. And, above all, we now have *Bush Forever*, which is perhaps their greatest achievement. The task is still ahead to fully implement this plan and that is why we need them just as much today as we did a decade ago."

Contacts

Renata Zelinova, UBC Office 9420 7207 or ubc@iinet.net.au



Resources

New Publications

Reserves and Birds of the City of Wanneroo has been compiled and produced through a collaboration between Bush Links, the City of Wanneroo, the Perth Biodiversity Project and Birds Australia. This 24 page full colour pocket guide provides location and access details for 19 reserves in the City of Wanneroo. Vibrant colour pictures complement a list of bird species to look out for in each of the reserves. The centre pages of the booklet are dedicated to an easy to read map and a comprehensive list of all 166 birds species is found at the end of the guide. Whether you are an avid 'birdo' or just someone that enjoys the outdoors, this booklet will be a valuable source of information to help you learn more about Wanneroo's natural environment. Copies are available from City of Wanneroo and Birds Australia WA. Contact Briony Moran 9405 5063.

Grow With Us is a resource kit for growing wonderful WA wildflowers in your garden. Produced by the Wildflower Society, it is a practical response to the renewed interest in growing local native plants. The kit covers the many reasons for growing locals, garden design, soils, plants, maintenance, references and further help. Available from the Society 9275 3404.

The Environmental Defender's Office (EDO) latest publication **Coast Law in Western Australian** is taken from papers presented at the EDO's Lines in the Sand conference held in May 2002 and edited by the EDO coast law

project solicitor, Sandy Boulter. The book and CD-Rom can be purchased from the EDO. Call 9221 3030.

The Babblers is Greening Australia (WA)'s new environmental education feature for children and the community. Contained within the organisation's newsletter, this first issue explores the smaller reptiles of the Perth region and provides practical tips on how to make your garden 'gecko and skink friendly'. Call GA (WA) 9335 8933.

Free e-mail networks and interactive websites

The Biodiversity Toolbox is an interactive web-based collection of vital information, tools and resources to assist local government to prioritise biodiversity conservation as an integral local issue. Central to the *Benchmarking Biodiversity Conservation Framework* (on which the toolbox is based) is a five-step system that allows councils to track performance towards conserving local biodiversity. Funded by the Natural Heritage Trust the website was produced by Environs Australia, supported by the Commonwealth's Biological Diversity Advisory Committee and Local Government Biodiversity Education Steering Committee. Visit www.ea.gov.au/biodiversity/toolbox/ and start with the 'self assessment test' to determine where your Council should begin this process.

The Department of Conservation and Land Management has developed a new e-mail network called **The Planning Diary**. This Management Planning Unit newsletter will keep subscribers up-to-date on the development of management plans for land vested in the Conservation Commission. The most recent diary entries include the Nature Reserves of Carnac Island and Forrestdale Lake. For more information contact Aberline Nix on 9334 0417 or aberlinen@calm.wa.gov.au.

New Education Officers

Fiona Marr and Gwen Watson have started job-sharing the role of education officer for the Armadale-Gosnells and Bannister Creek areas funded by the Natural Heritage Trust. Their role is to support local schools in learning about and acting on, environmental issues in the Upper Canning River catchment. Call 9496 0102.

In the pipeline

We understand that researchers at Kings Park and Bold Park are working on a new guide which will cover the **known plants in Kings Park and Bold Park**, updating and replacing *The Bushland Plants of Kings Park* by Eleanor Bennett and Patricia Dundas.



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