olan news urban nature

Issue 58 Winter 2006

Time of Makuru and Djilba in the Nyoongar calendar.

Urban Nature update Page 2 Wecowatch: Sharp rush Page 3 **Econotes: Wetland** restoration Page 4 **Operation starling** Page 5 Post-fire management Page 5 What's on Page 6 Learning opportunities Page 8 Funding opportunities Page 8 **Regional reports** Page 9 Group profile: Margaret River Page 11 Page 12 Resources

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

The Department of Conservation and Land Management merged with the Department of Environment, forming the new Department of Environment and Conservation (DEC) on 1 July 2006.

Celebrating a decade of bushland activity

FRIENDS of bushland areas in the City of Nedlands can celebrate positive achievements in biodiversity conservation, following more than a decade of collaborative effort involving community groups and local and State Governments.



Photomonitoring site at Shenton Bushland in 1994 (left) and in 2004 following a decade of weed control and rehabilitation by the Friends group. (Photos: Janice Marshall and Daniel Boase-Jelinek)

Friends of Shenton Bushland

By Daniel Boase-Jelinek

Shenton Bushland is a 21-hectare site of jarrah-banksia woodland. Now, after more than 10 years of management, it may be instructive to look back, and assess the benefits of the investment of effort and funds.

Photomonitoring points illustrate a dramatic difference in bushland condition between 1994 and 2004. Veldt grass is visibly less evident as a result of an ongoing spraying program. Fountain grass has been replaced by local native plants and, although its seeds are still viable in the soil, it has not re-established as the Friends cut out the new seedlings each year.

Probably one of the most heartening sights last year was the appearance of a small cluster of kangaroo paws. We would expect to find kangaroo paws in Shenton Bushland, but they have not been observed in all the time we have been working there. Their presence suggests we are making a real difference in the bushland!

Friends of Allen Park

By Lesley Shaw

Allen Park is a small coastal reserve south of Campbell Barracks in

Swanbourne. The Friends of Allen Park bushland group has been managing the remnant aided by the City of Nedlands over the past 11 years.

We have been involved in the restoration of some focus areas, which has resulted in reductions in veldt grass, marguerite daisy and pelargonium infestations.

Although we have not conducted any formal fauna surveys, we continue to discover and add to our fauna species lists. New findings last year included a western bearded dragon and a southern blind snake, and numerous sightings of sacred kingfisher, red-capped parrot and possums.

We believe the increase in vegetation density in recent years has enabled birds to find new nesting sites. A family of variegated fairy wrens has been nesting in the north-east corner of Allen Park, well outside the range of previous sightings.

Long-term vision required

Clearly, positive change is occurring in these bushland areas, but it is subject to ongoing effort and funding. This is a difficult message to sell to local and State Governments who are always under pressure to cut spending. Long-term commitment to these conservation projects is imperative to achieve continuing improvements in these bushland areas.

Congratulations to all those, community and government groups, involved in biodiversity conservation in the City of Nedlands.

Ecoplan News makeover

This is the first edition of the 'new look' *Ecoplan News*. Many of you reported that you were happy with *Ecoplan News* and its role in supporting community involvement in bushland conservation. So, most changes are to layout and design and an increase in text size to make the newsletter easier to read. 'Weedwatch' is a new section that provides technical information on weeds and their management.

Many of you wanted to know more about Urban Nature, so we will endeavour to include more information about the program and how you can get involved. Enjoy!

Urban Nature **UPDATE**

Ecoplan News questionnaire - how you responded

A sincere thank you to those of you who responded to the *Ecoplan News* questionnaire. A total of 155 questionnaires were returned and the comments and suggestions were very positive and constructive. We were overwhelmed by your comments such as "A very good publication which showcases a lot of the really good work being undertaken" and "Keep up the great work. *Ecoplan News* is an excellent resource!" It was great to see that so many of you highly regard the newsletter and appreciate its topics and articles.

Interestingly, there was a mixed reaction to sections such as regional reports. Readers generally acknowledged the

importance of giving groups the recognition they deserve, but thought the reports were sometimes repetitive. So we have reduced regional reports from three to two pages. There were numerous requests for more articles of a technical nature, and in response we now have a new feature – 'Weedwatch'.

Two of the most popular sections were 'Resources' and 'What's on' – which some readers found difficult to read, so we have improved the layout and increased the font size.

We hope that you will welcome the changes we've made. We look forward to your continuing support, contributions, comments and ideas for *Ecoplan News*.

Getting to grips with feral animals

A Skills for Nature Conservation workshop 'Getting to Grips with Feral Animals' held in May was attended by almost 50 participants. Four presenters with a range of expertise, Mark Garkaklis (Department of Environment and Conservation), Maggie Lilith (Murdoch University), Daryl Crews (City of Stirling) and Joe Tonga (Nestboxes for Native Animals), covered topics including domestic cats in urban and rural areas, rabbit control, monitoring techniques and feral bee control.

With introduced species posing serious threats to biodiversity, participants learnt techniques to manage feral animals, and how to apply this knowledge to their local patch of bushland or wetland. Monitoring techniques included gathering baseline data, and the use of 'track pads' and 'hair tubes' to determine the presence and abundance of various animals. These simple and effective ways of monitoring can assist in making informed decisions and measure the impacts of management actions (e.g. fencing).



Joe Tonga demonstrating use of a 'puffer' to treat nests of feral bees. Eradicating feral bees from tree hollows allows a range of native fauna such as owls and bats to recolonise key nesting sites. (Photo: Karen Bettink)

For more information on monitoring: www.nationalparks.nsw.gov.au/PDFs/Facts heet8_wildlife_watching.pdf

2006 huegelii hunt

The hunt for the rare grand spider orchid (*Caladenia huegelii*) is on again this October. DEC is calling on volunteers who are interested in spending some time walking through bushland to search for the rare orchids. Contact Vanessa Clarke on 9474 7056.

Have you been green?

It's time to get the recognition you deserve by nominating for the 2006 WA Environment Awards. The awards recognise the achievements and exceptional commitment of individuals, organisations or groups that promote and maintain high standards in environmental care. For more information visit www.environment.wa.gov.au or email awards@environment.wa.gov.au.

Bushland restoration training days

DEC's Urban Nature bushland restoration training days continue each month at Brixton Street Wetlands and Talbot Road Bushland. See 'What's on' (page 6–7) for details. Bookings 9474 7052/9474 7032.

Spring Ecoplan News

Spring *Ecoplan News* contributions should be sent to Urban Nature by Friday **1 September 2006.**

Compiled and edited by Jo Tregonning.

Previous issues

Visit www.naturebase.net/urbannature to access previous issues of Ecoplan News.

Contacts

Urban Nature office

Caren Sanders	9474 7040
Kate Brown	9474 7032
Grazyna Paczkowska	9474 7052
Karen Bettink	9474 7053
Department of Enviror	ment and

Conservation, Swan Region office 20 Dick Perry Avenue Kensington WA 6151

PO Box 1167 Bentley Delivery Centre WA 6983

Fax 9368 4299 Email ecoplan@calm.wa.gov.au www.naturebase.net/urbannature

weedwatch: Sharp rush – Juncus acutus

By Karen Bettink

THERE are several introduced rushes in Western Australia, one of which is rapidly becoming a serious environmental weed.

A native of Europe, southern Africa and North America, sharp rush (*Juncus acutus*) belongs to the family Juncaceae with *acutus* being Latin for 'sharpened' or 'pointed', referring to the stiff sharply pointed leaves and stems.

A prolific seeder, tolerant of waterlogging, salinity and drought, *J. acutus* can rapidly colonise open sandy areas. Once established it can exclude all native vegetation, and render areas impenetrable. It is not readily grazed by animals and is difficult to eradicate.

J. acutus has invaded the fringing vegetation of a number of wetlands on the Swan Coastal Plain including Lake Coogee, Market Garden Swamp and wetlands of the Rockingham Lakes Regional Park.

Although it can be found invading freshwater habitats, it seems to prefer more saline conditions. The rising salinity in some wetlands makes these habitats increasingly vulnerable to invasion. *J. acutus* also poses serious threats to remnant wetland vegetation of the Wheatbelt, particularly in naturally saline systems.

It can flower throughout the year

but mainly flowers in spring and summer. Inflorescences are four to 13 centremetres long with clusters of one to six very small green to reddish brown sessile flowers, with one or two leaf-like bracts at the base. Fruits are brown ovoid capsules five to six millimetres long and

pointed at the apex.



Large population of sharp rush at Market Garden Swamp, City of Cockburn. (Photo: Kate Brown)

Lifecycle and biology

J. acutus is a tussock-forming perennial to 1.5 metres high with numerous unbranched cylindrical, pith-filled, glabrous stems two to five millimetres in diameter. It has blue-green leaves that emerge from the base of the plant giving it a distinct hemispherical shape. Reproduction is mainly by numerous, small, highly viable seeds (each plant can produce up to 4000!) that are mostly water-dispersed allowing it to readily colonise the fringing areas of waterways. The seeds have been known to be spread through contaminated soil on machinery, and there have been cases where *J. acutus* has been mistaken as a local species and used

in restoration projects!

Look-alikes

J. acutus often grows adjacent to closely related native rush species, such as sea rush (J. kraussii) and pale rush (J. pallidus). Flowers and seed heads of sharp rush tend to be larger and reddish brown in colour, and the bigger tussocks Sharp rush (Juncus acutus) and inflorescence (above). (Illustrations: Karen Bettink)

and wider individual stems give it a more robust appearance. It is also very difficult to squash its leaves between thumb and forefinger.

In isolation it may be harder to identify. Look closely at the seed capsules, which protrude well beyond the tepals (equivalent to sepals and petals) compared to most native rushes.

The best test, however, is where most other rushes are slightly sharp-tipped, *J. acutus* is very painful to touch.

Management and control

There is limited information on the control of *J. acutus*; most of what is known is anecdotal or from limited trials. Physical removal and use of herbicides is difficult and has given variable results.

The Urban Nature team is preparing a brochure on the identification and management of *J. acutus* which will be distributed at a DEC workshop on *J. acutus* on 4 August 2006. For more information phone 9474 7053.

Further information

Parsons, W.T. and Cuthbertson, E.G. (1992) *Noxious Weeds of Australia.* CSIRO Publishing, Collingwood, Australia.

Kieth Turnbull Research Institute, Frankston Vic, Department of Primary Industries, VRO (2006).

ECONOTES:

Challenges in wetland restoration at Bibra Lake

By Denise Crosbie (Cockburn Wetlands Education Centre) and Norm Godfrey (Wetlands Conservation Society)

WETLANDS are dynamic and transient in nature, experiencing seasonal flooding and drying leading to changes in water depth and area. An understanding of some of these inherent changes has assisted in the development of a successful restoration program at Bibra Lake.

Zoning in wetlands

Classified as a permanent wetland, Bibra Lake is approximately 135 hectares with a maximum depth of 2.5 metres. Water levels are largely influenced by rainfall and evaporation, and peak around October and are at minimum levels during April. Different wetland plants and weeds are associated with different zones of the wetland (refer to diagram) and this has implications for restoration activities.

Getting started

Useful information includes water levels, which can be obtained from the Department of Water; and aerial photographs and topographic contour line overlays, which are available from the Department of Land Administration.

Trials and tribulations

Capillary rise

Dry/transitional

zone

During the early days at Bibra Lake we encountered the following problems:

 timing of grants restricted the early ordering of seedlings and thus limited species availability;

- chemically treated weeds did not mulch down in time for planting;
- late planting (September) required summer watering of the 'damp zone';
- extensive secondary weed invasion; and
- · predation of sedges by waterbirds.

Although we learnt to establish wetland trees and tall shrubs in weedy environments (though they grow more slowly), we still wanted to reintroduce understorey and attain a 'self-sustaining system' through dedicated weed control efforts.

Weeding: a never-ending task

Weed control has been a major task as the removal of one weed creates a space for another. A combination of manual and chemical control, combined with mulching and saturation planting, has been effective.

We have found the following:

- chemical treatment, using Biactive Glyphosate®, is best applied during summer when weeds are actively growing and water levels have receded;
- a staged approach is essential because active growth of weeds is staggered as water levels recede;
- commitment to monthly weed control is required because damp areas actively grow during periods of maximum water level, and grow în seasonal areas at minimum water level;

High water level

Seasonally

wet zone

Low water level

Permanently

wet zone

Seasonally

wet zone

Damp

zone

- weed biomass in the seasonal zone degrades during a flooding and recede event. It does not mulch down during the same period within the damp zone and remains unsuitable for planting – slashing is required; and
- mulching of the lower damp to upper seasonal zone with typha mulch (the weediest zone) reduces the frequency of weed control. Mulch in the lower seasonal zone degrades quickly once water levels rise. (If using mulch, consideration should be given to dieback, weeds and nutrient input).

Planting: quick rewards

Due to the dynamic nature of wetlands, many plants established may be growing outside of their optimum establishment zone. Be careful! Look at your historical water data and other wetland sites prior to planting. It is also difficult to predict maximum water levels, and during some years you may lose plants – this is part of the challenge.

Capillary rise

Dry/transitional

zone

Zonation in wetlands. (Illustration: Denise Crosbie)

Damp

zone

Wetlands plants grow rapidly and are much quicker to reward you than their slower bushland counterparts. Our planting efforts have included:

- saturation planting for quick coverage of bare areas;
- planting transitional and upper seasonally waterlogged zones during winter months;
- staging planting of the lower seasonal zones following a fall in water level (approximately November onwards);
- organising planting days after the maximum water levels; and
- propagating locally sourced seed and establishing a wetland seed production area for future supplies.

So, can we really bring back the understorey?

Unfortunately there are no quick answers when it comes to restoration activities. The understorey is looking fantastic in many areas and our knowledge is growing. We need to continue monitoring and evaluating sites to determine the true outcomes of our trials.

Further information:

Brown, K. and Brooks, K. (2002) *Bushland Weeds: A practical guide to their management.* Environmental Weeds Action Network (Inc).

Crosbie, D. and Godfrey, N. (in prep.) Challenges in Wetland Restoration: In WA Wetland Management Conference 2006: Proceedings. Cockburn Wetlands Education Centre.

For Water data information email waterinfo@water.wa.gov.au or call the Water Information Officer on 6364 6505.

Statewide Wetlands Database: www.naturebase.net/projects/wetlands_da tabase.html.

Wetlands of the Swan Coastal Plain: http://wetlands.environment.wa.gov.au.

2007 Woodside Community Partnerships, 1–31 July 2006

Woodside is seeking proposals that contribute to the social well-being and sustainability of our community.

For further information call 9348 4094 or visit www.woodside.com.au/citizenship.

ecoplan news

Operation starling underway

A survey between Jerdacuttup and Hopetoun in south-east Western Australia began last month to locate and eradicate invading flocks of starlings. This follows a recent expansion of starling numbers west of Esperance.

Starlings impact on agricultural and horticultural industries as well as biodiversity. They are black or grey in colour and about



Winter 2006

21 centimetres long with fine-pointed beaks and short tails. Any flock of small dark birds seen wheeling and turning quickly in tight groups while flying should be reported.

Sightings should be immediately reported to the Pest and Disease Information Service on freecall 1800 084 881. Detailed information is available at Department of Agriculture and Food offices, or at www.agric.wa.gov.au.

Do subterranean wetlands interest you?

Western Australia has a number of subterranean wetlands including those in caves and karst areas. Speleologists regularly undertake research on subterranean wetlands and document their findings. If you have an interest in this special type of wetland, assisting in projects documenting subterranean fauna, or have an interest in assisting progression of Ramsar listing of such sites in WA, contact Jay Anderson by email (rossjay@iinet.net.au).

Post-fire management in urban bushland



John Weaver demonstrates the use of a georeferencing system to map the extent of burnt areas at Lightning Swamp. (Photo: Phylis Robertson)

Recommendations from a practical session held by the Urban Bushland Council WA on 29 April 2006 (excerpt).

"The session discussed post-fire management in two bushland reserves – Lightning Swamp in Noranda, and Koondoola Regional Bushland. Advice was provided by representatives from the Fire and Emergency Services Authority of WA (FESA), the Dieback Working Group, Urban Nature and the Perth Urban Bushland Fungi project.

Actions for community groups outside the fire season were highlighted, including:

 updating Fire Response Plans by reporting changes to contact details, new rehabilitation sites, tracks, fencing, or new records of Threatened Flora (contact the Bush Fire and Environmental Protection Branch of FESA on 9323 9856);

- raising awareness of the impacts of fire in bushland among local residents and inviting them to get involved in helping the bushland regenerate;
- monitoring the recovery of bushland;
- monitoring weed invasion;
- · controlling weeds;
- keeping a record of fires in your reserve; and
- reporting suspicious activities to Crime Stoppers on 1800 333 000."

The complete article, including weed control funding sources, dieback prevention and community involvement tips, is available from the Urban Bushland Council. Contact Renata on 9420 7207 or by email (ubc@iinet.net.au).

what's on

Opportunities for you to participate! Visitors always welcome but please confirm activities with contact person. Most activities are FREE!

July

1 Saturday 1.30–3.30pm Bush care (and afternoon tea) with Mt Henry Peninsula Conservation Group, Call Jan 9450 0349.

2 Sunday

Fungi workshop at Trigg Bushland. Fungi identification and photography. Contact **PUBF**.

5 Wednesday 9am-12 noon Watsonia in Brixton Street Wetlands - history, control and monitoring. Contact UN.

6 Thursday–7 Friday Dieback management course with DEC, Dwellingup. Nationally accredited, covering legislation, biology, field detection and management. Cost \$350 plus accom. Contact Mike 9474 7046 or micpez@calm.wa.gov.au.

8 Saturday–9 Sunday Planting at Jandakot Regional Park. Contact CVA.

8 Saturday 10am–8pm Kura nitja burda (past present future) Nyoongar history, bushtucker walk, tool-making with Neville Collard at Boyagin Rock Nature Reserve. Bookings SFNC:

8 Saturday 10am

Fungi walk and weeding with Friends of Periwinkle Bushland, Charonia Ave, Mullaloo. Call Dot 9401 3724.

9 Sunday 10am–12 noon Fungi foray at Modong Nature Reserve. Meet: Oakford Farm Trees, 141 King St, Oakford. Contact PUBF.

9 Sunday 8.30am

Fungi walk with Friends of Cottonwood Crescent Bushland Reserve, Dianella. Meet: reserve carpark, Channel 7 Private Rd via Gay St. Call Jan 9344 2872.

Activities key



Hands on – bushland and wetland management activities.

Walks and tours – look, listen and enjoy guided walks and excursions.

Skills development activities – talks, presentations, training courses and workshops.



Meetings and events – group meetings, expos, festivals and conferences.

9 Sunday

Beach sweep with WA Naturalists' Club. Contact 9228 2495 or wanats@iinet.net.au.

12 Wednesday 10am-4pm Fungi workshop targeting local government officers. Cockburn Wetlands Education Centre. Contact Chris 9411 3502 or chris@cockburn.wa.gov.au.

13 Thursday 8pm Another year at Kew. Talk by Alex George. Call AWSWA.

13 Thursday 8am (half-day) Bird watching with Birds Australia at Star Swamp. Meet: carpark,

end of Mary St, Watermans Bay. Contact Michael 9383 7749 or mail@birdswa.com.au.

16 Sunday 10am–12 noon Fungi foray at Maida Vale Reserve. Meet: Kalamunda Archery Club, Ridge Hill Rd, Maida Vale. Contact PUBF.

22 Saturday 1–3pm Tree planting in Bungendore Park, Bedfordale with AWSWA. Meet: Admiral Rd entrance and follow Wattle Rd. Bring afternoon tea to share. Call Kim 9470 2297.

22 Saturday 8am Guided walk in Star Swamp Bushland. Call FoSSB.



AGM and guest speaker. Call FoSSB.

- 23 Sunday 10am–12 noon Fungi foray at Queens Park Bushland. Meet: main entrance, Station St (gate closest to Welshpool Rd). Contact PUBF.
- 23 Sunday 8am (half-day) Bird watching with Birds Australia at Herdsman Lake, Stirling. Meet: Maurice Hamer carpark. Contact Richard and Liz 9383 7749 or mail@birdswa.com.au.



Assist the friends of Hollywood Reserve, Allen Park and Shenton Park Bushland with rehabilitation projects. Contact CVA.

28 Friday 9am–12 noon Watsonia in Talbot Road Bushland – history, control and monitoring. Call UN.



29 Saturday 8am

Guided bushwalk through Trigg Bushland. Meet: carpark next to St Mary's School, Elliott Rd. Call Barbara 9447 5406.

30 July

Planet Ark's National Tree Day Australia's biggest community tree planting event. To get involved call 1300 88 5000 or visit www.planetark.com/treeday.

31 July-11 August

Francois Peron National Park, Shark Bay. Assist DEC with fence construction, seed collection and tracks. Project Eden mammal reintroduction program. Contact CVA.

August

2 Wednesday 9am–12 noon Hesperantha falcata in Brixton Street Wetlands – introduction and GIS mapping. Bring wellies. Call UN.

4 Friday Managing sharp rush (Juncus acutus) workshop. Call UN.

4 Friday 7.30pm Mosses and lichens. Talk by Eric McCrum. Contact WA Nats.

5 Saturday 1.30–3.30pm Bush care (and afternoon tea) with Mt Henry Peninsula Conservation Group. Call Jan 9450 0349.

5 Saturday 9am–4pm Success stories 1 – south. Visit bushland sites managed by community/government. Meet: Rockingham Regional Environment Centre. Bookings SFNC.

6 Sunday A day in the hills. Contact WA Nats.

6 Sunday 9am-12 noon

Weed control 1 workshop. Boya Hall (Helena Valley Recreation Ground) cnr Clayton Rd and Scott St, Helena Valley. Weed identification, mapping, control, project planning. Contact BSFH.

7 Monday–11 Friday Planting, weeding, mulching at Leige Street Wetland. Contact CVA.

10 Thursday 8pm Rare plants and interesting finds in the Goldfields. Talk by Vanessa Clark at AWSWA.

12 Saturday 8.30am (half-day) Bird watching with Birds Australia in Eglinton. Meet: cnr Wanneroo Rd and Pipidinny Rd. Call Brice 9255 3710.

12 Saturday 2pm Weeding with Friends of Periwinkle Bushland, Charonia Ave, Mullaloo. Call Dot 9401 3724.

13 Sunday–15 Tuesday 2nd National Wildlife Tourism Conference – conservation and management; products and markets; planning and development; and presentation and interpretation. Esplanade Hotel, Fremantle. (Web: www.promaco.com.au/ conference/2006/wildlife).

> 14 Monday–18 Friday Weeding, planting, use of erosion control matting. Woodlupine Brook "Drain to Living Stream" project, Wattle Grove. Contact CVA.

17 Thursday 8.30am (half-day) Bird watching with Birds Australia at Burswood open spaces. Meet: information centre, Resort Dr. Call Tom 9383 7749.

18 Friday 8pm Living dunes presentation. Contact KRMB Nats.

19 Saturday 9am–12 noon Control weeds on your property field day, Mandurah. Practical techniques, weed identification, control. Call Green Skills 9525 5978.

19 Saturday 5pm–9pm Spotlighting as a monitoring tool. Meet: Piney Lakes Environmental Education Centre, Winthrop. Bookings SFNC.

20 Sunday 'Trek the Trail' 9 km walk, Mundaring to Darlington. Cyclists depart 9am, walkers 10am. No pets. Suitable for families, leisure cyclists, prams and wheelchairs. Shuttle bus and cycle pick-up available along trail. Contact 9290 6732 or denisehardie@mundaring.wa.gov.au.



Registration/contact details Organisations providing a series of activities:

AWSWA	Armadale Branch of the Wildflower Society of Western Australia (Inc.). History House, Jull St, Armadale (rear of Courthouse). Call Chris 9398 9140.
BSFH	Bush Skills for the Hills offers free hills-focused workshops. Contact

Robbie 9424 2216 or Roberta.Circosta@emrc.org.au.

- CVA Conservation Volunteers Australia. Contact Linda 9336 6911 or perth@conservationvolunteers.com.au.
- FoSSB Friends of Star Swamp Bushland. Henderson Environment Centre, Groat St, North Beach. Call Christine 9447 2983.

KRMB Nats Kwinana Rockingham Mandurah Branch (KRMB) of the WA Naturalists' Club. Rockingham Regional Environment Centre, Safety Bay Rd, opposite Lake Richmond, Peron. Contact 9591 3077 or www.wanats@iinet.net.au.

20 Sunday 8am (half-day)

Bird watching with Birds Australia at Wellard Wetlands, Baldivis. Meet: wetlands, Zigzag Rd. Call Clive 9332 7265.

25 Friday 9am–12 noon Watsonia control at Talbot Road Bushland. Call UN.

26 Saturday 8am Guided walk in Star Swamp Bushland, Call FoSSB.

26 Saturday 9am–4pm Success stories 2 – north. Visit bushland sites managed by community/government. Meeting place for bus trip TBA. Bookings SFNC.

27 Sunday 9am–12 noon Lupin pull at Star Swamp Bushland. Call FoSSB.

September

1 Friday 7.30pm Spiders. Talk by Mark Harvey. Contact WA Nats.

2 Saturday 8.30am (half-day) Bird watching with Birds Australia at North Lake, Melville. Meet: Progress Dr carpark. Call Wynton 9383 7749.

September 4–17 Long Range excursion: Kimberley coast ex Broome. Contact WA Nats.

6 Wednesday 9am-12 noon Sparaxis bulbifera in Brixton Street Wetlands – history, goals, monitoring and control. Bring wellies. Call UN.

9 Saturday 1.30–3.30pm Bush care (and afternoon tea) with Mt Henry Peninsula Conservation Group. Call Jan 9450 0349. 9 Saturday 10am–4pm Wetland management on private property. Wandi Community Centre. Bookings SFNC.

9 Saturday 2.30pm Spring walk with Friends of Periwinkle Bushland, Charonia Ave, Mullaloo. Call Dot 9401 3724.

10 Sunday 8.30am-12 noon Djilba [Spring] self-guided bushwalk in Bungendore Park, Bedfordale with AWSWA and City of Armadale. Start at Armadale Christian College carpark, Admiral Rd. Refreshments available. Call Kim 9470 2297 or Sue 9399 0148.

10 Sunday 8.30am Guided walk with Friends of Cottonwood Crescent Bushland, Dianella. Meet: carpark, Channel 7 Private Rd via Gay St. Call Jan 9344 2872.

14 Thursday 8pm Whicher Range plant communities. Talk by Bronwen Keighery. Contact AWSWA.

14 Thursday 8am (half-day) Bird watching with Birds Australia at Bedfordale Hill, Armadale. Meet: Cohuna Wildlife Park carpark, Mills Rd, Gosnells. Call David 9383 7749.

15 Friday 8pm Forest ecology presentation. Contact KRMB Nats.



16 Saturday 9am–12 noon Weed control 2 – war on watsonia workshop. Bushland regeneration, herbicides. Meet: Cnr Coulston Rd and Scott St, Boya. Contact BSFH.

16 Saturday 9am–1pm Beauty in Perth's banksias. Free bus trip to explore species, distribution, reference sites. Contact Urban Bushland Council 9420 7207 or ubc@iinet.net.au. PUBF Perth Urban Bushland Fungi project. Fungi walks and workshops. Contact Roz 9334 0547 or rozh@calm.wa.gov.au.

SFNC Skills for Nature Conservation. FREE training courses from Swan Catchment Centre (SCC), DEC and Greening Australia (WA). Calendar at www.calm.wa.gov.au/urbannature/learning_opportunities.html. Bookings SCC on 9374 3333.

- UN Urban Nature (DEC). Bushland restoration training days (and morning tea) at Brixton Street Wetlands (Alton St, Kenwick) and Talbot Road Bushland (cnr Talbot Rd and O'Connor St, Swan View). Call 9474 7052/9474 7032.
- WA Nats Western Australian Naturalists' Club. Hew Roberts Lecture Theatre, Clifford St, Nedlands. Contact 9228 2495 or wanats@iinet.net.au.

17 Sunday 1-5pm

Heavenly Hectares mini expo, Pinjarra. Small-landholder property management. Guest speakers, prizes and giveaways. Call Waroona Landcare Centre 9733 2628.

18 Monday–22 Friday Planting with Capel Wetland Centre, South-West WA. Contact CVA.

23 Saturday 8am Guided walk in Star Swamp Bushland, Call FoSSB.

23 Saturday 9.30am–2.30pm Caring for the Canning canoe trip – historical, scientific and cultural significance. Venue TBA. Bookings SFNC.



Djilba [Spring] self-guided bushwalk in Churchman Bushland with City of Armadale. Contact Sue 9399 0148 or www.armadale.wa.gov.au.

24 Sunday 2pm Guided walk at Star Swamp Bushland. Call FoSSB.

29 Friday 9am–12 noon Dieback at Talbot Road Bushland interpretation, mapping and management. Call UN.

> Please send us your October, November and December events to Urban Nature by 1 September 2006.

Highlights

3–9 July	NAIDOC week 'Nyoongar Day'
12-20 August	National Science Week
7 September	Threatened Species Day
8 September	World Oceans Day



Planting season is upon us and Men of the Trees need help. List of sites and times at www.menofthetrees.com.au.

Planting with CVA. Contact 9336 6911 or www.conservationvolunteers.com.au.

WA Gould League community activities for children and adults: bird walks, frogs, wetlands, Nyoongar know-how. Venue: Herdsman Lake Wildlife Centre, Wembley. Contact 9387 6079 or www.wagouldleague.com.au.

Wildflower Society of WA events Guest speakers and excursions. Contact the Wildflower Society 9383 7979 or http://members.ozemail.com.au/ ~wildflowers/.

Nearer to Nature Guided activities in and around Perth. Affordable prices. Program at www.naturebase.net/nearertonature. Bookings: DEC 9295 2244.

25 September–6 October Coastal-based conservation activities at Exmouth in conjunction with DEC. Contact CVA.

Australian Association for Environmental Education 2006 Conference, Bunbury. Contact Jennifer 9370 6726 or j.pearson@ecu.edu.au.

ecoplan news

Funding opportunities

Coastwest Community Support

Grants – ongoing. Up to \$3000 (from a pool of \$30,000 per year) is available to community groups for capacity building exercises. Projects should encourage groups to get involved in on-ground coastal and marine management activities and to maintain the momentum of groups that completed a project but are yet to receive another grant.

Regional Coastal Management Group Support Grants – ongoing.

Up to \$8000 per year is available to regional groups to provide financial support for administration and capacity building of community groups.

Visit www.wapc.wa.gov.au/Coast/Coastwest /114.aspx. Contact the Coastwest coordinator (Bill Cuthbert) on 9264 7834 or by email (Coastwest@wapc.wa.gov.au).

Interpretation of Cultural

Heritage. Grants to help the community appreciate and engage with our State's cultural heritage, sites, places or objects. Visit www.lotterywest.wa.gov.au, email grants@lotterywest.wa.gov.au, phone 9340 5270 or toll free 1800 655 270. Applications close Friday 7 July 2006.

Gordon Reid Foundation Conservation Grants – ongoing.

Grants supporting community organisations conserve WA's natural habitats and diversity through Lotterywest. Projects may include revegetation activities, protection of remnant vegetation, flora and fauna surveys, management plans for reserves, public education projects such as the production of brochures and biodiversity research projects. Visit the Lotterywest website at www.lotterywest.wa.gov.au, email (community_funding@lottery.wa.gov.au), phone 9340 5270 or freecall 1800 655 270.

Australia Post Community

Development Grant. Community groups, including local landcare groups, can now apply for yearly grants of up to \$3300 to help improve their local community and environment. Round 2 closes 29 September 2006. Visit www.landcareonline.com/funding_ opportunity_details.asp?fo_id=9.

Learning opportunities

Conservation Planning Symposium, Perth 27–28 September 2006.

Presentations on approaches to conservation planning, and tools relevant for large-scale conservation planning and priority setting. Organised by the Southwest Australia Ecoregion Initiative, a consortium of members working towards a conservation strategy for southwest Australia. For symposium updates, email your contact details to swcoordinator@wwf.org.au.

Challenger TAFE, Murdoch

Campus. Semester begins 24 July. Courses include Conservation and Land Management Training Package – introductory level 2, levels 3 and 5. Study full-time or part-time. Contact Steve Ross on 9229 8427 or Diana Corbyn on 9229 8412 for more information.

Apace WA – Introduction to bush regeneration, July to September

2006. Informative four-day session of theory and practice covering the fundamental principles of bushland regeneration. Bookings 9336 1262.

Perth Urban Bushland Fungi (PUBF) walks and workshops are being held in metropolitan bushland areas this winter Vicit warm functioneth org au

held in metropolitan bushland areas this winter. Visit www.fungiperth.org.au or see 'What's on' (pages 6–7).

Wildflowers, wetlands and bush

restoration. Expand your knowledge and skills! Courses begin 24 July at Swan TAFE, Midland. Evening classes in understanding wetlands (Monday), wildflower identification (Monday) and bush restoration (Thursday). Day classes in the above plus animal habitats, plant propagation, bushland weeds, safety with chemicals, fencing and machinery. Fulltime Certificate in Land Management is also available. For more information, contact Ted Johnson by email (ted.johnson@swantafe.wa.edu.au) or Anne Taylor on 9374 6314 or by email (anne.taylor@swantafe.wa.edu.au).

Naragebup Rockingham Regional Environment Centre (Inc.).

Sustainable living courses. Visit www.naragebup.org.au.



Examining fungi during a PUBF excursion to the Lowlands property in the Shire of Serpentine–Jarrahdale in May 2006. (Photo: PUBF)

Recipients of Conservation Council of WA Awards 2006 – congratulations!

John Oldham Conservation Employee Award

Denise Crosbie, Wetlands Officer, Cockburn Wetlands Education Centre.

WA Honours List

Mike Casley – in recognition of biodiversity conservation teaching, Canning River foreshore rehabilitation, conservation with

DEC (and formerly CALM) at Ningaloo Reef and the creation of turtle habitats.

David James – a dedicated volunteer in the Jandakot and Forrestdale area.

David Pike – in recognition of his efforts in raising public awareness of the importance of Perth's bushland remnants over the past 20 years.

regional reports

Please send your regional report (approximately 200 words) and photo to Urban Nature by 1 September 2006.

Catchment group raises alarm on feral fish

By North Metro Catchment Group

The North Metro Catchment Group (NMCG) has been surveying fish populations in Bennett Brook, Caversham since September 2005. This work is funded by the Natural Heritage Trust (NHT) and is under a management agreement with Whiteman Park.



One of the introduced cichlids found in Bennett Brook. (Photo: by Ben de Haan)

In February 2005 we alerted the Department of Fisheries to the discovery of an unidentified species of feral fish, thought to belong to the popular exotic aquarium fish family cichlid. Native to South America, this species is agressive and breeds rapidly, and has had devastating effects on native fish populations in other areas.

The Department of Fisheries began an intensive survey program of Bennett Brook to identify the extent of the fish and its effects on native fish. To date, more than 600 individuals have been caught ranging in size from six to 200 millimetres. The exact distribution is undertermined and the tolerance of the fish to the salty conditions of the Swan is also unknown.

NMCG is working in partnership with the Department of Fisheries, Swan River Trust, Department of Water, Recfishwest, City of Swan and Whiteman Park on a management and eradication plan based on verification of distribution.

For more information on the survey, please contact Ben de Haan, biodiversity projects officer, NMCG on 9271 7922.

Call Department of Fisheries on its Fishwatch line on 1800 815 507 to report sighted fish and visit www.fish.wa.gov.au for media updates.

Friends continue bushland work in the City of Bayswater

By Kim Grace

While the original Friends of Baigup Wetlands and Hinds Reserve founded by Harry Bastow have disbanded, there is work continuing in these reserves, as well as the Eric Singleton Bird Sanctuary. The Friends of Noranda Bushland was founded in 1998 and the Friends of Lightning Swamp in 2000. Both are now working with the City of Bayswater to make sure the hard work Harry began and his group does not go to waste. I hope the support by Council and their environmental coordinator continues, as these reserves are important, not only for the City of Bayswater but the Swan River itself.

If any of the old Friends members or the community would like more information, contact Kim on gracekh@iinet.net.au.

Muddy planting at Yellagonga

By Jennifer Hawkes



Barry Poole (left), Graham Edwards (Member for Cowan) and Will Carstairs (in foreground) planting around Lake Goolellal at Yellagonga Regional Park. (Photo: Dee O'Brien)

Friends of Yellagonga Regional Park had a very successful planting day along the eastern side of Lake Goolellal. The May planting was funded by an NHT Envirofund grant. It was, despite the lack of rain, very gooey going with mud to our shins. Graham Edwards, Federal Member for Cowan, came to lend encouragement and to 'chew the fat' over what could be done to encourage people to appreciate the wonderful areas around both lakes Goolellal and Joondalup.

For further information contact Jennifer on 9448 0053.

Friends of Star Swamp Bushland – president honoured

By Christine Curry

David Pike was one of the Conservation Council of WA Honours List recipients recognised during WA Conservation Week for his long-term commitment to environmental protection.

David has been a member and president of the Star Swamp Bushland Friends for many years and has been instrumental in the management and conservation of the reserve. He has worked tirelessly on weeding and planting projects and has instigated and led monthy walks. David has compiled a photographic collection of flora and fauna within the reserve, much of which is on display in the Henderson Environment Centre. David was also involved in developing the Environment Centre.

David is actively involved with most northern suburbs groups, including Friends of Lake Gwelup, Friends of Trigg Bushland and the Wildflower Society of WA Northern Suburbs Branch. He is also a recognised expert on flora and environmental issues.

Friends of Star Swamp Bushland can be contacted on 9447 2983.

Out of town

By Shirley Fisher

Bunbury Naturalists' Club meet every second Tuesday of the month at 5.30pm at Lotteries House, Victoria Street. In July, Graham Fisher will present the results of the Ross River mosquito study.

The Herbarium group meets every Tuesday morning at DEC's Bunbury office, and has been recording the health of relocated rare flora in ironstone communities.

The Leschenault Community Nursery is overflowing with plants waiting to be planted when the winter rains come. The nursery is assisting the Biodiversity Branch of the Leschenault Catchment Council with a seed-collecting workshop.

For more information call Shirley on 9791 5915 or 9756 7515.

regional reports

Partnerships, lobbying and on-ground works essential to the success of Friends groups

By Mike Norman (Chairman)

Joondalup Coast Care Forum (Inc.) had its AGM in April. It was an opportunity to look back at the last year's achievements, which included:

- submission on Burns Beach Foreshore Management Plan;
- input to the City of Joondalup (CoJ) tourism development plan;
- gaining an NHT grant of \$8500 for a coastal revegetation project at Iluka/Ocean Reef;
- · rescuing native plants from clearing in Iluka;
- discussing poor seedling quality with CoJ, resulting in new arrangements for future supply of quality local provenance plants;
- obtaining a Coastwest grant of \$7740 for Mullaloo Beach rehabilitation;
- successful lobbying to replace a weed management contractor with a bush regeneration contractor for spraying weeds along dual use paths in the coastal reserves;
- contract to prepare a Vegetation Management Plan (Satterley Property Group) for Public Open Space on the old

Friends of Rockingham Lakes unite

By Emma Reksmiss

Friends of Paganoni have joined forces with other conservation-minded residents of Rockingham to form the Friends of Rockingham Lakes. The group will also be assisted by Men of the Trees, Wildflower Society, Naragebup Environment Centre, DEC and local volunteers.

Friends of Rockingham Lakes will concentrate on bushland restoration, rehabilitation and weed control in the Rockingham Lakes Regional Park, which is co-managed by DEC and the City of Rockingham. The Rockingham Lakes area is considered to be a regionally significant area of great conservation and heritage value and includes Lake Cooloongup, Paganoni Swamp and Point Peron.

We are planning future night stalks as well as a range of other activities including weed control, fungi walks and bird watching.

For further information contact Emma Reksmiss on 9431 6517 or email emmarek@calm.wa.gov.au. CSIRO site in Marmion. The \$6600 contract will be used as a fundraiser;

- formation of new group Friends of North Ocean Reef and Iluka Foreshore;
- assisting CoJ to win the WA Coastal Excellence award;
- assisting CoJ to get a federal grant of \$11,000 for development of native coastal garden and mural at Tom Simpson Park, Mullaloo; and
- providing input to CoJ public consultation process on Ocean Reef Road extension.

In April and May, we helped to get some 'green' councillors voted onto Council. Our recent community planting event at Mullaloo was attended by the new Mayor, Deputy Mayor and five councillors. This winter and spring, we have planned a series of coastal plantings at three locations with follow-up weeding work.

For further information or to assist with coastal plantings call Mike on 9449 1978.

Paganoni night walk inspires

By Leonie Stubbs

In April the group went on a successful night walk at Paganoni Reserve led by DEC ecologist Mark Garkaklis. We sighted brushtail possums, Gould's wattle bats and a tawny frogmouth, and heard two other bat species and a boobook owl calling. While no sightings were made of quendas (southern brown bandicoots) we saw signs of their presence in the form of tracks. Joe Tonga brought along his equipment so we could not only see the bats as they passed through the spotlight's beam, but could also hear them as they zoned in on their prey.

Seeing our native species at close range proved to be such a motivating influence; as a consequence of the night, some form of feral animal control is now being considered at the park.

For further information on any of our activities, please call Leonie Stubbs on 9537 1831.

Swan TAFE students get their hands dirty

By Anne Taylor



Swan TAFE land management students painting herbicide on watsonia and babiana at Throssell Park. (Photo: Anne Taylor)

Swan TAFE Land Management students from Midland Campus have been busy helping community groups from the Mundaring and Swan shires with maintenance works and flora surveys in some of their bushland areas.

Snottygobble, bull banksia, jarrah and various understorey plants at Black Cockatoo Reserve were treated with phosphite as protection from dieback. In nearby Throssell Park, watsonia and babiana weeds growing in granite rock crevices were painted with Roundup® – a task that required plenty of patience and care with application!

At Quenda Hollow students enjoyed getting wet and dirty in Bugle Tree Creek, building rock riffles and stabilising the base of severely undercut banks. Vegetation surveys at Strettle Reserve, Mahogany Creek, and at Talbot Reserve, Swan View, have provided students with valuable experience in using the Perth Biodiversity Project Natural Area Assessment Forms.

The students worked with local Friends groups with all of the above tasks, in what have proved to be excellent partnerships. The Mundaring Shire bushcare coordinator provides assistance to ensure work activities run smoothly. Other community groups such as Glen Forrest Fire Brigade have also lent a hand with watering seedlings at Strettle Reserve.

GROUPPROFILE Friends of Margaret River 'A' Class Reserve

By Ann Matei

INSPIRED to form a bushland friends group because of weeds spreading into a local reserve, this group of volunteers has achieved a great deal in conserving biodiversity in Margaret River during the past five years.

Margaret River 'A' Class Reserve 18720 is a significant 'river-to-ridge' bushland entry statement to the town with most of its 20 hectares in good to excellent condition. It was first declared a national park in 1926 with the arrival of the group settlers and is now a reserve for parks and recreation vested with the Augusta-Margaret River Shire. In more recent times it has had a section of the old Railway Reserve, now the Rails to Trails Walkway, added to its area.

The Friends group was formed in 2001 by local residents concerned about the spread of weeds like Pittosporum undulatum and Watsonia versfeldii - garden favourites

with the early townsfolk. Weeds had colonised the margins of the reserve to the increasing detriment of the native flora and fauna. Added to these were a wide selection of more recent garden escapees, and wind and water-borne invaders.

Bradley method of bush regeneration

The group, consisting of six to eight volunteers and a bushland regeneration project supervisor, decided early in 2001 to adopt Bradley's bush regeneration techniques.

Briefly these techniques are fourfold:

 work from the 'good' bush out towards areas of worse weeds, allowing native vegetation to make its impact as it gains strength;

(Photo: Ann Matei)

- replant or reseed with local provenance native vegetation so as not to leave gaps for other weeds to invade;
- · use minimum soil disturbance methods of weed control wherever possible; and



Producing tube stock for revegetation using facilities at DEC's community nursery. (Photo: Ann Matei)

 follow-up and re-work areas regularly until bushland becomes self-regenerating. (Oh, how we have re-worked some of those areas!)



Club and the Department of Local Government and Regional Development have made this ongoing work possible.

Key achievements

In 2003 the project was a runner-up in the State Environment Awards for its bushland and waterways work. Key achievements include:

 installation of WA's first rockramp fishway at Apex Weir;

- the effective control of watsonia along the Bussell Highway edge of the reserve;
- removal of hundreds of P. undulatum, ranging from seedlings removed by hand to forest giants which required chainsaws and stump painting;
- collection of seed, devising potting medium and the production of thousands of tube-stock using DEC's. community nursery facilities; and
- a herbarium of about 300 species compiled with duplicate vouchers sent to the WA Herbarium. The herbarium can be viewed at the Margaret River Regional Environment Centre in Town View Terrace (phone 9758 8078) where the Friends meet weekly on Wednesdays at 9.30am to carpool to the reserve.

Good advice

The Friends advice to others would be to plan conservatively, record scrupulously (even the failures) and be prepared to make haste slowly. Never lose sight of the fun and the passion that started it all and take time off for a sausage sizzle now and then.

For information on future activities contact Ann by email (timelessland@optusnet.com.au) or Margaret River Regional Environment Centre Inc. on 9758 8078 or by email (mrrec@internode.on.net).

Resources

New publications

Native and introduced Persicaria (knotweeds) to south-west Australia. An information sheet prepared by Urban Nature on knotweeds provides information on how to recognise these plants and discover if you have a native knotweed in your patch. Copies available by contacting Urban Nature

on 9474 7052.

Top Deck Native Grasses (2005) R. Myers and W. Brown. Playing cards which dou le as an identification reference. Beautiful illustrations of seed head appearance of the top 52 genera in South Australia. Email deck52@bigpond.net.au.

A Pictorial Field Guide to the Beetles of Australia. Part one: stigmoderini by Mark Golding. Ocean Publishing WA, 50 pages, RRP \$25. Pictorial field guide to the larger jewel beetles (*Buprestidae*).

Australian Weed Management

Systems. Brian Sindel (Ed). Explores how weeds function, principles of weed population management and practical application. RRP \$42.90 from R.G. and F.J. Richardson on (03) 5286 1533.

Tools and equipment

Phosphite treatment gear available for hire. Contact Toni Burbidge, the Shire of Mundaring or the Dieback Working Group on 9257 9937 if in another local government area. Nominal fee for private residents, free to community conservation groups. Visit www.dwg.org.au to

download fact sheet on using Chemjet spring loaded syringes.

DIY phosphite kits available for purchase from Dieback Treatment Services (1300 785 311). Kits include syringes, one-litre Phos-inject, drill bit, gloves, mixing bucket and instructions. Cost from \$49.95.

Are your details correct?

Can you please check your mailing details and let us know if we need to change anything by phoning us on 9474 7052. If you'd prefer to receive this newsletter electronically please send us an email titled 'email me' to Ecoplan@calm.wa.gov.au.

Website watch

Native Grass Resources Group's (NGRG) website, www.nativegrassgroup.asn.au, provides information on native grasses, NGRG activities, sourcing seed and tubestock.

Statewide Wetlands Database (WetlandBase), www.naturebase.net/ projects/wetlands_database.html, provides access to datasets – hydrology, geomorphology, tenure, listings of neighbouring threatened fauna, flora, and ecological communities, sampling sites, administrative boundaries and aerial photography.

The Introductory Weed Management Manual – a training resource manual produced by the Weeds Cooperative Research Centre on weed management techniques. Contact Nikki Ward on (02) 6274 2082, email nikki.ward@deh.gov.au or download from www.councils.wa.gov.au/ directory/walga/index.html/environment/ Envnewsletters/2006/april/weeds.

Ear to the Ground – Department of Education and Training's Landcare Education Newsletter. Provides information on events, professional development opportunities and resources promoting landcare and landcare education. To receive the newsletter contact Patricia Dames on 9690 2250 or email pdames@agric.wa.gov.au with your postal or email address.

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