

Issue 68

**Summer** 2008-2009

*Time of Birak and Bunuru  
in the Nyoongar calendar.*

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Department of  
Environment and  
Conservation



*Our environment, our future*

*Bushland News is a quarterly  
newsletter of Urban Nature, a  
Department of Environment and  
Conservation (DEC) program to  
support community involvement  
in bushland conservation.*

## Education reduces illegal activities in bushland

**The management of bushland areas often involves reducing threatening activities such as rubbish dumping, the use of motor cycles and off-road vehicles, firewood cutting, horse riding, vandalism, shooting and camping. These illegal activities damage flora and fauna, introduce dieback and weeds, and impact on community safety and amenity. They are difficult and costly for land managers to police but programs that aim to educate the public and change people's behaviour can be very effective.**

### Off-road vehicle operation

*By Doug Giles*

As a result of significant population growth in Mundaring, an increasing amount of illegal and anti-social behaviour has been occurring in bushland. During a weekend in August 2008, a multi-agency operation was conducted in the greater Mundaring area involving 27 officers from the Department of Environment and Conservation's (DEC) Perth Hills District, Wildlife Branch and Regional Parks Unit as well as officers from the WA Police, Water Corporation and Mundaring Shire.

Patrol teams were formed with at least two vehicles and representatives from each agency. This enabled coordinated enforcement of all appropriate legislation. It avoided the problem of an offender 'getting off' because they were stopped by someone with no authorisation (i.e. the 'wrong' agency or land tenure jurisdiction).

Forty-five formal offences and 41 cautions were made. Face-to-face contact enabled information to be disseminated and inter-agency contacts to be developed. Most importantly, word-of-mouth and media reports are spreading the word that joint patrol operations are happening and offenders can be charged. With positive feedback and a high impact on offenders, the agencies involved are looking forward to future similar operations.

### Positive action at Banksia Road Nature Reserve

*By Jo Tregonning*

With the development of hobby blocks and an influx of new residents in 2004, my local reserve was suddenly being vandalised.



*Illegal rubbish dumping – a frustrating issue for managers of many bushland areas. Photo – Cliff Bliss*

This included cutting trees for firewood, horse riding, gates being stolen, fences cut to gain access and kangaroos being shot.

I felt that most of these people probably didn't know how special this Bush Forever reserve was and why it needed to be looked after – some education was needed. DEC and the Shire of Serpentine-Jarrahdale were very supportive and worked with me to write a brochure, which they printed. The brochure outlined why the reserve is important, what damage was being done and a list of local authorised alternative horse riding trails. I did a letterbox drop over two weeks and a DEC ranger visited the reserve on two weekends and talked to people. Signs were installed at firebreak access gates and the missing gate was replaced with fencing. It was a fantastic success and vandalism of the reserve has been negligible since this action.

### Keep Australia Beautiful Council (KABC WA)

*By Cliff Bliss*

Illegal rubbish dumping within bushland areas is not only unsightly,

but also damages vegetation and can introduce weeds and create a fire hazard. In 2007, KABC employed two investigators for a 12-month pilot program to tackle illegal dumping. Areas most affected appear to be those bordering State forest and new urban developments, so the Darling Scarp was chosen for the program, which was completed in partnership with the East Metropolitan Regional Council. Investigations, enforcement, education and training resulted in a significant reduction in the incidences of illegal dumping and lasting relationships were established with community groups, State agencies and local governments.

KABC has posters, postcards, signs and litter reporting pamphlets that can be used for a letter drop around illegal dumping areas. Dumping incidents can be reported on 1300 766 541 if you have some way of identifying the culprit (car registration, identifiable papers, eye witnesses). If there is no means of identification then please contact your local shire or DEC office.

## Urban Nature **UPDATE** *By David Mitchell*

Urban Nature is very pleased that Julia Cullity is joining the team as the new Community Education Coordinator (Bushland Community Support). Yes a pretty long title, but we will think of a better, catchier title for Julia soon enough. Julia is already known to many *Bushland News* readers as she has worked with many groups involved in bushland management, and is bringing her fantastic enthusiasm and impressive skills to the team. With Julia's guidance, Urban Nature looks forward to developing some new and productive projects with bushland managers.

## Managing Weeds in Bushland course



Andrew Webb (Nature Conservation Officer South West Region) and Micheal Tichbourne (community volunteer) show participants successful lovegrass control and bushland restoration work along Capel Railway line. Photo – Kate Brown

The Urban Nature 'Managing Weeds in Bushland' course is a five-day nationally accredited course designed for operational staff and conservation officers involved in bushland restoration. The course was again held at Busselton and some of the highlights were field trips and practical sessions hosted by DEC staff from the South West Region. As well as a series of site visits, participants spent an afternoon mapping Victorian tea-tree invading coastal vegetation around Ellensbrook, and a morning spent monitoring herbicide trials on *Gladiolus undulatus* in clay-based wetlands at Fish Road Nature Reserve.

## Nature Conservation Muster



DEC officers discuss management of the eastern shore of Peel Estuary as part of the Swan Region Nature Conservation Muster. Photo – David Mitchell

This year the annual DEC Swan Region 'Nature Conservation Muster' focused on the southern part of the Swan Coastal District and the Marine Conservation program. The muster provided an opportunity for Urban Nature staff to learn more about other aspects of the region's work, including marine conservation and management, while also providing the chance for other Swan Region staff to see the *Euphorbia terracina* demonstration site at Paganoni Swamp.

## Rapid assessments of bushland – help needed

DEC Swan Region Ecologist Geoff Barrett has started a project to investigate methods to rapidly assess whether bushland reserves are functioning ecologically. Ecological function is a key component of biodiversity and tends to be overlooked because of the high costs associated with the usual measures of whether a site is healthy and functioning well. Geoff is investigating the use of easy, but repeatable measures such as weed invasion and bird and ant activity to give estimates of ecosystem health and function.

Geoff is currently trialling several of these methods and is keen to get feedback from the community at this early stage in the project. If anyone can help by testing some of the rapid assessment methods in their local reserve, it would be greatly appreciated. Please contact Geoff on 9423 2907.

## Autumn *Bushland News*

Autumn *Bushland News* contributions should be sent to Urban Nature by **Thursday 26 February 2009**.

*Compiled and edited by Jo Tregonning.*

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Current and archived issues of *Bushland News* are available at [www.dec.wa.gov.au/programs/urban-nature/bushland-news.html](http://www.dec.wa.gov.au/programs/urban-nature/bushland-news.html)



## BUSHLAND WEEDWATCH:

# Narrowleaf cottonbush (*Gomphocarpus fruticosus*)

By Rebecca Hayes

**Narrowleaf cottonbush is native to southern Africa, the Mediterranean and Arabia and was introduced as a garden plant to Australia in the early days of settlement. By 1894 it was recorded as naturalised in all new colonies in Australia, including Perth. It is now a significant threat to bushland and wetlands from Gingin to Esperance.**

Narrowleaf cottonbush is an erect slender shrub growing one to two metres high, with dull green, narrow, opposite leaves, five to 12.5 centimetres long by six to 18 millimetres wide tapering to a point. The name *Gomphocarpus* is a combination of the Greek *Gomphos*, meaning 'club', and *karpus*, meaning 'fruit'. The club-like bladder fruits are the most distinctive feature of narrowleaf cottonbush. They are irregularly egg-shaped, six centimetres long by two to 2.5 centimetres wide, tapering to a narrow beak and covered in long soft bristles to one centimetre long.

Plants flower after two years during the warmer months of the year. The white or creamy flowers occur in drooping umbels of three to 10 flowers in the leaf axils. They are shortly tubular with five fringed waxy lobes.

The plant produces copious amounts of seeds annually, which are readily dispersed by wind and water. These can germinate at any time of the year, with obvious peaks during spring and autumn. Seedlings grow rapidly and can resprout



*Narrowleaf cottonbush (Gomphocarpus fruticosus) invading a freshwater paperbark community along the Canning River, Ferndale. Photo – Rebecca Hayes*

within a few weeks of germination from the root or crown if aerial growth is injured. Narrowleaf cottonbush is also able to send up root suckers and has allelopathic qualities, enabling it to form dense expanding thickets to the exclusion of other plant species.

A milky sap is exuded from all parts of the plant when damaged. This sap is a known skin and eye irritant and is toxic to livestock, where it has caused many fatalities.

These qualities enable narrowleaf cottonbush to invade many environments, including intact bushland, where it can be found displacing local plants along gullies, wetlands, hillsides and woodlands. It is also common in wasteland, pasture and road verges.

### Look-alikes

Balloon cottonbush (*G. physocarpus*) is very similar to narrowleaf cottonbush and is known to readily hybridise with this species. Capable of invading similar habitats to balloon cottonbush, it is currently only known from a few locations within the Perth metropolitan area but has the potential to spread further. Balloon cottonbush can be determined by its more spherical, larger fruit (five to 7.5 centimetres long by two to 5.5 centimetres wide) borne on a straight stalk.

### Management and control

Hand removal of narrowleaf cottonbush is effective, though care must be taken to minimise soil disturbance and subsequent disturbance of the long-lived soil-stored seed bank. It is also essential to remove the crown and as many lateral roots as possible to avoid resprouting.

**WARNING:** Contact with the sap of narrow leaf cottonbush can cause painful inflammation of the skin and eyes, and may cause temporary or permanent



*Narrowleaf cottonbush plant (A), leaf (B), flowers (C) and fruit (D). Illustration – Charles A. Gardner (Western Australian Herbarium, DEC, collection)*

blindness. When undertaking physical control methods, be sure to use gloves, safety glasses and protective clothing to prevent contact with the sap.

Where there is little chance of off-target damage, foliar spray with 1.5 per cent glyphosate between September and December. Alternatively, try cutting the plant off as close to the crown as possible and immediately painting with 50 per cent glyphosate. Beware of using glyphosate products in and around waterways.

### Further reading

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

Brown, K. and Brooks, K. (2002) *Bushland Weeds; A Practical Guide to Their Management*, Environmental Weeds Action Network, Greenwood, WA.

Hussey, B.M.J., Keighery, G.J., Dodd, J., Lloyd, S.G. and Cousens, R.D. (2007) *Western Weeds 2nd Edition; A Guide to the Weeds of Western Australia*, The Plant Protection Society of Western Australia Inc., Victoria Park, WA

<http://florabase.dec.wa.gov.au/>

## ECONOTES:

# Summer flowering plants

By Grazyna Paczkowska

Although few people venture into Perth's bushland during the hot summer season, many flowering plants can be seen at this time of year. At a time when there are few sources of nectar and pollen available, these summer flowering plants have more opportunity to attract many pollinators. Although they may not flower every year, and peak flowering may vary from year to year, it is worth visiting the bush to take a look.

### The obvious

Nothing more clearly signals the approach of summer than the Western Australian Christmas tree (*Nuytsia floribunda*). It is easy to spot as it has masses of brilliant orange blossom during the 'festive' season. The Western Australian Christmas tree is the largest mistletoe in the world and is semi-parasitic, requiring host plants to provide some of its nutrients. Its underground suckers attach themselves to surrounding roots and even underground telephone cables can become the target of their clasping suckers. Their semi-parasitic nature probably helps them to flower and produce winged, wind-dispersed fruits during the hottest and driest part of the year.

The woody pear (*Xylomelum occidentale*) is a handsome small tree and many of us are familiar with its woody grey pear-shaped fruits. During December to January it has masses of creamy white flower spikes that attract bees, wasp and flies.

### The not-so-obvious

Summer pimelea (*Pimelea rara*) was first collected by James Drummond in 1873 with some more collections dating up to 1919. It was then not seen or collected for 68 years before being rediscovered in



Western Australian Christmas tree (*Nuytsia floribunda*) in full bloom. Photo – Grazyna Paczkowska

1987. The mystery of its disappearance is partly attributed to its summer flowering habit – a time when plant surveys are rarely undertaken. In addition, summer pimelea is only known to occur on the Darling Range and is often hidden by the dense shrubs among which it grows.

In spring 2006, during watsonia monitoring works at Meelon Nature Reserve, a strange plant was encountered in one of the plots – a basal clump of terete fleshy green leaves which tapered into a tiny hook. Lacking

flowering material, it was impossible to identify this mysterious plant, so it was recorded as a 'herb with hooks'. Searching continued for two seasons for a clue to identify the plant, but it was not until autumn 2008, during a field trip to Brixton Street Wetlands, that an old flower stalk of *Schoenolaena juncea* was found with green leaves still at the base. *S. juncea* is an example of a summer flowering species belonging to the carrot family (Apiaceae). There are only two species in this genus – both endemic to WA – occurring in swampy areas on the Swan Coastal Plain and Darling Range near Perth. During the cooler seasons, it produces few basal leaves which wither early and, in summer, give rise to a slender erect inflorescence ending in numerous white, dark-tipped flower heads.

### References

Brown, A., Thomson-Dans, C. and Marchant, N. (Eds) (1998) *Western Australia's Threatened Flora*. Department of Conservation and Land Management.  
George, A.S. (2002) *The Long Dry: Bush Colours of Summer and Autumn in South-western Australia*. Four Gables Press, Kardinya.  
Marchant, N.G. et al. (1987) *Flora of the Perth Region: Parts One and Two*. Western Australian Herbarium, Perth.  
<http://florabase.dec.wa.gov.au/>



Woody pear (*Xylomelum occidentale*) stem with leaves and flowering spikes (left), pear-shaped hard woody fruit (right) which open to release large winged seed (middle). Illustration – Susan J. Patrick (Western Australian Herbarium, DEC, collection)



## Summer flowering natives – some Christmas icons

**New South Wales:** NSW Christmas bush (*Ceratopetalum gummiferum*), Christmas bells (*Blandfordia grandiflora* and *B. nobilis*)

**Queensland:** Christmas orchid (*Calanthe triplicata*)

**South Australia and Tasmania:** Christmas bush (*Bursaria spinosa*)

**Victoria:** Victorian Christmas bush (*Prostanthera lasianthos*)

**Western Australia:** Western Australian Christmas tree (*Nuytsia floribunda*)

For more information visit [www.anbg.gov.au/christmas/](http://www.anbg.gov.au/christmas/).

## A new online window into WA's biodiversity

By Paul Gioia

Countless WA surveys and research projects have resulted in many datasets and reports containing valuable information about managing our natural environment. Until now, much of this information has been hard to access. DEC, in partnership with the Western Australian Museum, has developed NatureMap, a free, easy-to-use website that moves us closer to a 'one-stop shop' for questions about biodiversity.

NatureMap contributes to conservation planning by providing planners, researchers and community groups with access to nearly a million records for close to 14,000 species from the main collections of the Western Australian Herbarium and Western Australian Museum, as well as 14 major DEC databases. There are tools to map species distribution and diversity across the State, download data, report on endemism, check invasive and conservation status and much more.

NatureMap has been primarily funded by DEC, with substantial support from the *Saving our Species* Biodiversity Conservation Initiative. Additional support to date has been received from the Avon



Catchment Council Baseline Natural Resource Management Project, for which DEC is the lead agency.

Most of NatureMap's development time has been spent on integrating data but the database is expected to expand rapidly. Future developments will include:

- New themes, including plant response to disturbance and Avon regional focus. Other possibilities include weeds and ferals, cane toads and climate change.
- New layers, such as pastoral leases and vegetation maps.
- Enhanced displays for relevant publications and reports, or scientific sites of interest for an area.

In addition, NatureMap could provide a mechanism for acquiring new data from the public about our environment, for example to monitor the impact of climate change.

Visit <http://naturemap.dec.wa.gov.au>.

## Rare sunmoth discovered in Sorrento

The discovery of a new population of the endangered graceful sunmoth (*Synemon gratiosa*) in Porteous Park, Sorrento, was the highlight of three years of surveys conducted by DEC. This diurnal moth is active from March to early April and typically inhabits banksia woodlands in Perth's northern suburbs. The new population surprised researchers by its occurrence in coastal heath vegetation, where it has not previously been located.

Funded by the Natural Heritage Trust through the Swan Catchment Council, the surveys have recorded low densities of the sunmoth at eight sites. The sunmoth is thought to only move up to 300 metres, which would make it unlikely to disperse between populations or re-colonise sites following local extinction. The 2008 surveys confirmed that two known locations continue to sustain populations of the moth despite two years of minimal sightings. DEC will conduct further surveys in suitable habitat in March and April 2009.

For more information, contact Nicole Willers on 9423 2900 or [nicole.willers@dec.wa.gov.au](mailto:nicole.willers@dec.wa.gov.au).



The endangered graceful sunmoth (*Synemon gratiosa*) Photo – R. Kinsey

## Caring for our Country Open Grants recipients announced

Projects to receive funding under the Federal Government's Caring for our Country Open Grants were announced in November 2008, with WA receiving 10 per cent of the \$28.5 million. Successful WA projects included biodiversity management in the Western Desert and Rangelands, weed management in the Kimberley, conservation of the Gouldian finch through Indigenous fire management, habitat protection for the endangered Carnaby's black-cockatoo, education in the Blackwood Basin, sustainable brushwood production in Moore catchment and a regional conservation plan for the south-west global biodiversity hotspot. More details about funded

projects across Australia can be found at [www.nrm.gov.au/projects/open-grants.html#open](http://www.nrm.gov.au/projects/open-grants.html#open).

The Australian Government is now calling for investment proposals for projects that will achieve the targets outlined in the *Caring for our Country Business Plan 2009-10*. Visit [www.nrm.gov.au](http://www.nrm.gov.au) for more information and updates about the business plan and details of how you can submit proposals. Contact Neil Riches (Caring for our Country Facilitator – Environment) on 9285 8487 or [neil.riches@nrm.gov.au](mailto:neil.riches@nrm.gov.au).


**Opportunities for you to take part! Visitors always welcome but please confirm activities with the contact person. Most activities are FREE!**

Please send us your April, May, June and early July events by Thursday 26 February 2009.

 **Conservation Volunteers Australia 2009 conservation activity schedule.** Overnight country trips to one-day activities. 2/343 Newcastle Street, Northbridge. Call Andrew 9227 5711 or visit [www.conservationvolunteers.com.au](http://www.conservationvolunteers.com.au).

 **Sundays 8am–10am Bushcare activities** every Sunday with the Friends of Shenton Park Bushland. Contact Dani 9381 3470 or [bojel@inet.net.au](mailto:bojel@inet.net.au).


 **Sundays 8.30am Bushcare activities** with the Friends of Wireless Hill are held on the second and fourth Sunday of each month. Meet at main car park. Contact Margaret 9315 9075 or [s3mmatthews@hotmail.com](mailto:s3mmatthews@hotmail.com).


 **Thursdays 8am–9am Bushcare activities** every Thursday with Byford Enviro-Link. Call Johanne Garvey or Kristy Gregory 9526 0199.

**Saturdays 9am Bushcare activities** with the Friends of Brixton Street Wetlands are held on the third Saturday of each month. Call Regina 9459 2964.




## February

 **10 Tuesday 8pm Wheatbelt Orchids** with guest speaker Dr Mark Brundrett. Wildflower Society of WA (Perth Branch). Subiaco Community Centre. Call Nina 0427 936 566.

 **12 Thursday 8pm Butterflies** with guest speaker Eric McCrum. Wildflower Society of WA (Armadale Branch). History House, Jull St, Armadale near the courthouse. Call Chris 9398 9140.


## March

**28–29 Saturday–Sunday 9am–11am**

 **Pancakes in the Park** with the Friends of Bungendore Park in conjunction with the Hills Heartbeat Festival, Armadale Christian College, birds of prey and reptile displays. Bungendore Park, Admiral Rd, Bedforddale. Call Ron 9495 2626.

## April

**19 Sunday 9.30am**

 **Busy Bee** with the Friends of Piesse Brook. Meet at the gate into Kalamunda National Park, end of Schipp Rd, Piesse Brook. Wear boots, gloves and a hat. Bring drink, secateurs and a smile. Email [linda@johnstanley.cc](mailto:linda@johnstanley.cc) to confirm. Check website [www.friendsofpiessebrook.org.au](http://www.friendsofpiessebrook.org.au) for additional information.

## 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.

## Highlights

**Monday 2 February 2009 WA Wetland Management Conference**, Cockburn Wetlands Education Centre. Registration forms at [www.cockburnwetlands.org.au](http://www.cockburnwetlands.org.au) or email [denise@cockburnwetlands.org.au](mailto:denise@cockburnwetlands.org.au) or call 9417 8460. Concessional rate for community group volunteers is \$20 (includes all refreshments and proceedings).

**28 March–5 April Conservation Week** celebrates WA's unique environment and promotes awareness and action towards building a sustainable future. Community groups, environmental organisations, schools, local business and individuals are invited to take part by registering an event already happening during conservation week or consider organising a special event to communicate the importance of the environment. The Conservation Council of WA has organised a photography competition, science project and awards. Call 9420 7266 or visit [www.conservationwa.asn.au](http://www.conservationwa.asn.au).

**Sunday 29 March Earth Solutions Expo**, Northam. Guest speakers Peter Andrews (author *Back From the Brink*) and Gerard Sierro (ecological architect). Photographic exhibition and live music. To take part call 9574 2306 or 9622 8043.

**Sunday 23–Thursday 27 August 2009 Conference of the Society for Ecological Restoration International**, Perth. Visit [www.seri2009.com.au](http://www.seri2009.com.au).

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## Going bush with *Nearer to Nature*



Enjoy the bush with one of *Nearer to Nature's* diverse and exciting nature-based activities this January school holidays. Activities for the adventurous include Hi-Tek Trail Trekkers, and Canning Canoeing Capers; for the curious there is Deadly and Dangerous, It's a Shell Life and Wild about Whales and for those who want to experience an encounter with amazing native animals come to Wonders of the Wildlife Ark, Nocturnal Delights, or Who's Who.

The evening Valentine's Day special, Darlings on the Range, includes a



guided walk, gourmet picnic hamper, a chance to meet native animals with an animal carer, and a movie in the open-air Kookaburra Cinema.

For a brief forest getaway, why not book a night of forest camping at the Perth Hills National Parks Centre? The camp ground features universal access, 12 individually marked sites, a camp kitchen and even hot showers! To complete the evening, stroll to the Kookaburra Cinema where you can enjoy an open-air screening on weekends during November to April. For information call 9295 2244.



## Funding opportunities

### Coastwest Grants

Coastwest Grants are for on-ground coastal management activities and to facilitate community involvement and capacity building. Eligible applicants include local and State government and community groups. Grants are up to \$150,000 and projects must be completed within 12 months. They are awarded with a funding ratio of 1:1 Coastwest Grant dollar to applicant dollar. Applications for grants will be open between February and April 2009.

Coastwest Community Support Grants encourage community groups to become involved in coastal and marine management and to maintain the momentum of the group while waiting for more funding. Funds are allocated for materials, contractors, equipment hire, training, capacity building and group establishment costs. Rolling grants up to \$3,000 are available on a 'first come, first served' basis.

Contact the State Coastwest Coordinator on 9264 7834 or [coastwest@wapc.wa.gov.au](mailto:coastwest@wapc.wa.gov.au). Visit [www.wapc.wa.gov.au/coastwest](http://www.wapc.wa.gov.au/coastwest).

### Threatened Species Network Community Grant Program

These grants fund on-ground work for the ongoing health of our natural environment, specifically targeting nationally threatened species and ecological communities. Funding activities include habitat restoration, weed and feral animal control, monitoring, surveys, fencing and fire management. Closing date is to be advised. Contact Michael Roache or Katherine Howard on 9387 6444 or [tsnwa@wwf.org.au](mailto:tsnwa@wwf.org.au) or visit [www.wwf.org.au/ourwork/species/tsngrants](http://www.wwf.org.au/ourwork/species/tsngrants).

### Junior Landcare Grants Program

Junior Landcare is Landcare Australia's youth program, which aims to get kids actively involved in their environment. Any school or organisation that would like to involve their students in landcare projects, in conjunction with local landcare groups, can apply for grants. The program targets water quality and conservation, waste reduction and recycling, school gardens, biodiversity and environmental monitoring. Grant applications range from \$500 to \$1,000. Applications close 6 March, 15 May, 7 August and 23 October 2009. Contact Sarah Harris on (03) 9662 9977 or [sarah.harris@landcareaustralia.com.au](mailto:sarah.harris@landcareaustralia.com.au).

### Australia Post Community Development Grant

Community and landcare groups can apply for yearly grants of up to \$3,300 for tools and equipment, or to help raise awareness and encourage more community members to get involved. Dates and programs will be posted on [www.landcareonline.com.au](http://www.landcareonline.com.au) in early 2009. Contact the Landcare Project Coordinator on (03) 9662 9977 or [grants@landcareaustralia.com.au](mailto:grants@landcareaustralia.com.au).

## Learning opportunities

### Catchments, Corridors, Coast Wednesday 14 January–Friday 16 January 2009

This practical three-day program aims to develop an awareness of environmental education resources, to support and address core sustainability issues and to develop networks in WA. Learn what is being done by community groups and government, what resources are available and how we can work together. Includes extensive take-home resources linked to the current Western Australian education curriculum.

Those who should attend include community groups, youth organisations, teachers, student teachers, Sustainable Schools Initiative participants, tertiary students or new graduates, environmental and government officers. Expressions of interest for sponsored positions to attend are available. If you are a volunteer for your local Landcare group or work with Scouts or Guides, you are eligible to apply. Mark your registration form 'EOI Sponsored Position'.

Contact Catherine Baudains on 9360 6393 or [c.baudains@murdoch.edu.au](mailto:c.baudains@murdoch.edu.au). Visit [www.aaeewa.org.au](http://www.aaeewa.org.au).

### What does your garden grow?

This 'Train the Trainer' workshop aims to provide knowledge and tools to deliver informed advice to customers, community groups and the general public about local, national, environmental, noxious and declared weeds. It will assist you to educate the general public in how to protect the environment as they garden. It also includes a resource kit that can be easily adapted for you to use in your local situation. Time: 9am–3pm. Cost: \$200.

Tuesday 17 February 2009, Canning River Eco Education Centre, Wilson. Contact Melinda Snowball at SERCUL on 9458 5664 or [melindasnowbal@sercul.org.au](mailto:melindasnowbal@sercul.org.au).

Thursday 19 February 2009, Esperance. Contact Robyn Cail on 9071 7685 or [robync@southcoastnrm.com.au](mailto:robync@southcoastnrm.com.au).

### What pesky plant is that?

This workshop aims to provide the knowledge and tools to use the 'Environmental Weeds of Australia' Lucid3 key CD-ROM, which identifies more than 1,000 major environmental weeds in Australia. It is a practical workshop focused on the process of identification using the computerised key and the requirements for submitting samples to herbaria for formal identification. Time: 9am–3pm. Workshop cost: \$200. Optional CD-ROM: \$59 (excluding GST and postage).

Wednesday 18 February 2009 at the Canning River Eco Education Centre, Wilson. Contact Melinda Snowball at SERCUL on 9458 5664 or email [melindasnowbal@sercul.org.au](mailto:melindasnowbal@sercul.org.au).

### Sustainable Living Workshops

We all know greenhouse gas emissions are a BIG problem. But did you know that organic waste in landfill plays a significant role in this? Learn how you can easily 'dispose' of this problem in the home.

You can choose workshops that will help you make compost; run your own worm farm; grow your own yummy veggies; create DIY fertilisers, herbicides and insecticides; have happy hens; create a stunning native garden; and reduce your CO<sub>2</sub> emissions.

Thanks to the Zerowaste initiative the first 15 participants registered get FREE entry into each workshop. So get in early! Held Sundays beginning 15 February, 1.00–2.30pm at the Rockingham Environment Centre. Contact Naragebup on 9591 3077 or [rrec@naragebup.org.au](mailto:rrec@naragebup.org.au) or visit [www.naragebup.org.au](http://www.naragebup.org.au).



## Recovery of Hudman Road Reserve

By Alison Dugand

One hundred years ago, Hudman Reserve (38.9 hectares) in Darlington was a hive of activity due to the extraction of granite required for the Fremantle Harbour Scheme. By 1901, dozens of iron and hessian huts were clustered near the site (many traces of the settlement are still visible between the quarry and Coulston Road). Granite was transported by train from Boya siding to Fremantle. On completion of the harbour, the supply of blue metal continued in the region until the early 1960s.

The quarry has been used as an amphitheatre but is now somewhat neglected and suffering the impact of too-frequent fires, erosion, rubbish dumping and aggressive weeds. The reserve supports sensitive vegetation communities associated with granite and dolerite outcrops, including open shrublands of hakea, verticordia, grevillea and low wandoo woodlands, with significant areas in excellent condition.

Local resident Peter Day has almost eliminated watsonia from Hudman Reserve as part of his long-term watsonia control program in Darlington. During the past four years he has also contained and controlled lupins. During August 2008, the Eastern Hills Green Corp team, with support from the Shire of Mundaring's Bushcare Coordinator and Parks Maintenance Officer, contributed to Peter's efforts with a major attack on the worst of the lupin infestation in the large quarry. This was conducted in good time before seed pod formation. The long-term vision is that the site be rehabilitated, although extensive on-going weed management will be required to ensure success.

For more information contact Alison on 9290 6685 or [alisondugand@mundaring.wa.gov.au](mailto:alisondugand@mundaring.wa.gov.au).



Jacob Enwright (Eastern Hill Green Corp Team) sprays lupins in Hudson Road Reserve. Photo – Alison Dugand

Please send us your regional report (150–200 words) and a photo by Thursday 26 February 2009. Text may be edited in response to volume of submitted reports.

## Weeding Paganoni *By Leonie Stubbs*



Weeding pretty Betsy from Paganoni Swamp. (Left) Bev Tomren, Arne Tomren (Friends of Paganoni Swamp), Sam Nunn (Bush Forever), Anne Bellman (Friends of Paganoni Swamp), Grazyna Paczkowska (Urban Nature) and Michael Sarich (Bush Forever crew). Photo – Leonie Stubbs

It has been a busy few months for the Friends of Paganoni Swamp. Some new members joined the group just in time to undertake some serious hand weeding, particularly for Geraldton carnation weed and pretty Betsy. Staff from DEC's Urban Nature and Bush Forever crew helped weed. What a fantastic resource they are, with so much enthusiasm and ability to undertake a range of tasks. The hand weeding combined well with the group's weed spraying program concentrating on Geraldton carnation weed, pretty Betsy, cape tulip and dune onion weed funded by a Community Conservation Grant and Cemex Australia Ltd.

Are we winning? We think so, particularly with Geraldton carnation weed and pretty Betsy. Management of Geraldton carnation weed along the western boundary was more effective this year, and there was a significant decrease in cover of pretty Betsy at the one site that was sprayed last year. It will be interesting to check the three pretty Betsy sites next year to see if there is a marked reduction at all three sites.

For more information contact Leonie on 0439 921 298 or [Friends\\_Paganoni\\_Swamp@westnet.com.au](mailto:Friends_Paganoni_Swamp@westnet.com.au). For information on volunteering opportunities with Rockingham Lakes Regional Park call 9431 6500.

## Bungendore Park activities

By Kim Sarti

Bungendore Park Management Committee, in conjunction with the City of Armadale, held its Djilba Spring Walk in the park on 21 September. It was a bleak day, but some 55 intrepid people still took part before heavy rains fell at 10am. Morning tea provided by the Armadale Lions Club was a warm welcome as walkers huddled under the shelter. There were some people who went home very wet that day!

The ever-popular Bungendore Bush Breakfast cooked by Armadale Lions Club was held in the park bushland on 9 November. More than 70 people enjoyed the breakfast, organised in conjunction with the Armadale Wildflower

Society. A display of 50 weeds that threaten our natural bushland generated much interest. A lot of people were unaware that wattle and eucalypt species from the eastern states are weeds in our bushland. Following breakfast, society members led four guided walks through the jarrah-marri forest in Bungendore Park.

A successful 2009 Swan Alcoa Landcare Program grant will enable the continuation of revegetation, feral honeybee and dieback control work in the park along with some interpretive signage.

Consider joining us for 'Pancakes in the Park' on 28–29 March (see What's On). Call Kim on 9470 2297.



## Initiative to encourage biodiverse gardens in Byford

By Jodee Lysaght

A grant from the Peel Development Commission enabled the Serpentine-Jarrahdale Community Landcare Centre to run five 'Great Gardens' workshops in 2008. The workshops at Byford, Jarrahdale, Pinjarra and Mandurah informed participants about recreating local native bushland in their gardens, water-wise plants and fertilisers. They were a resounding success, attracting an average of 83 participants per workshop. Additional funding will enable another three workshops to be held in autumn 2009.

At a Byford Enviro-Link meeting in early 2008, the group discussed how it could improve the streetscape and capture the 'rural feel' that it wants to maintain and enhance in Byford. The group decided to adopt a positive approach by congratulating those gardeners that were doing the 'right thing' by creating native flora gardens. The Australian Native Nursery on King Road agreed to supply a \$10 voucher for any resident achieving a 10-star rating for their garden. The group received a grant from the Serpentine-Jarrahdale Shire to print certificates. They hope that if someone receives a certificate



Christine Randall (left), Julie Boaler and Athol Wigg collecting seed as part of a workshop in January 2008 with Byford Enviro-Link. Photo – Colleen Rankin

with a five-star rating it may encourage them to undertake additional changes to their garden to elevate their garden's status to a 10-star rating.

Byford Enviro-Link members continue their weekly activities in bushland, roadside or railway reserves to weed, plant, collect seed, mulch and pick up litter.

For more information contact Jodee on 9525 5786 or email [jodee@landcaresj.com.au](mailto:jodee@landcaresj.com.au).

## Friends of Porteous Park

By Mike Norman

Porteous Park is two-and-a-half hectares of bushland in Sorrento. Formed in 2002, the Friends group has successively weeded the bushland sections of the park. During 2008, it put in a big effort to achieve 'zero tolerance' of carnation weed, fumitory, pelargonium and perennial veldt grass. It is trying to promote natural regeneration with some supplementary planting of local provenance seedlings supplied by the City of Joondalup. More than 300 volunteer hours were expended during 2008, including visits by Conservation Volunteers Australia, church and school groups.

In April 2008, the City of Joondalup fenced the bushland areas of Porteous to close all but one of the informal paths and reduce the incidence of lawn clippings being dumped. An isolated piece of bushland was fenced into the whole, and the city sprayed the gap of turf between them ready for planting in 2009. The community supported this initiative, except for the closure of the north-east track, which caused some opposition and will therefore be re-opened with a turnstile gate at each end.

In 2008 a previously unknown population of the rare graceful sunmoth (*Synemon gratiosa*) was found at Porteous Park (see article page 5).

For more information contact Mike on 9448 1978 or [mike.norman@bigpond.com](mailto:mike.norman@bigpond.com) or visit [www.porteouspark.org.au](http://www.porteouspark.org.au).

## CVA – a resource of willing volunteers

By Andrew Soltys

In mid-2008 Conservation Volunteers Australia (CVA) completed two weeks of track and trail maintenance along the Yaberoo Budjara Heritage Trail, in conjunction with the City of Wanneroo and DEC. Located 26 kilometres north of Perth, the 28-kilometre walk trail starts at Lake Joondalup and continues north to Yanchep National Park. The trail is a significant cultural landmark, having been used by the Nyoongar Aboriginal people to move between lakes Joondalup, Neerabup and Yanchep.

CVA is a not-for-profit, non-government organisation managing a volunteer network on community-based conservation projects across the State. It has more than 3,500 volunteers on the WA database, and is

involved with numerous projects throughout WA including seed collection, revegetation, weed maintenance, exclusion fencing, property maintenance, boardwalk construction and deck construction, wetland revitalisation and surveying of vegetation and fauna species. CVA has an excellent long-term track record of working in partnership with numerous State Government departments, as well as local councils and shires. Partners find this an excellent way to assist in the management of their annual budgets, while providing much-needed community service to WA's willing volunteers.

For more information contact Andrew Soltys (WA Regional Manager) on 9227 5711 or [asoltys@cva.org.au](mailto:asoltys@cva.org.au) or [www.conservationvolunteers.com.au](http://www.conservationvolunteers.com.au).

## Shire of Kalamunda leading the way

By Nicole O'Neill

The Shire of Kalamunda has been a participant in the Cities for Climate Protection Program since 2000 and has been officially recognised for its proactive approach to environmental sustainability. The shire was elevated to the Cities for Climate Protection Plus, which aims to mitigate the effects of climate change and improve sustainability in the corporate sector with a whole-of-council approach. The shire is committed to achieving a 20 per cent reduction goal for corporate activities, aiming to stabilise community emissions by 2010.

This national program involves 230 local government authorities. To find out how you can get involved in environmental sustainable initiatives call the shire on 9257 9999.

## Bicton foreshore conservation *By Marion Nairn*

The Bicton Environmental Action Group (BEAG) was founded in 2004 with the aim of protecting and enhancing the natural foreshore environment from Bicton Baths to Point Walter. Considerable work has been carried out at Point Walter Reserve and along Blackwall Reach Parade to eliminate invasive weeds and to restore the natural flora. BEAG work tirelessly to weed the bush with some assistance from Conservation Volunteers Australia, which has included volunteers from as far away as Japan.

The City of Melville in conjunction with BEAG received an \$18,000 grant for restoration of the foreshore including weed-spraying, jute matting and planting. More than 7,000 seedlings were planted in 2007 with more plantings in 2008. Bicton Primary School students also planted. Seed collection and an ongoing smoked water trial is hoped to bring some good results through direct seeding.



*Volunteers clearing accumulated oyster shell from Bicton Baths. Photo – BEAG*

During the past two years BEAG has removed more than nine cubic metres of Sydney oyster shell and rubble from the Bicton Baths area. This has considerably improved the use of the popular river beach area, but more work needs to be done. Two foreshore cleanups are held each year. After the first winter storms, the clean up from

Bicton Baths to Blackwall Reach usually results in a big harvest of boat rubbish and plastic. An extra cleanup from Point Walter to Blackwall Reach is held at the end of winter. These are surprisingly popular and well-attended activities.

Feral bees and foxes are common in Point Walter Reserve. Feral beehives have been removed under a biodiversity grant through the City of Melville. Fox sightings have increased in recent years with some even visiting houses in the area. A coordinated removal program is to be conducted by the City of Melville and the Town of East Fremantle. This will also need the involvement of Fremantle City Council, Department of Defence and Fremantle Port Authority.

*BEAG always welcomes more helpers. Contact Peter Neesham on 9339 7795 or [pneesham@bigpond.net.au](mailto:pneesham@bigpond.net.au).*

## 2008 in review for JCCCCF *By Mike Norman*



There are currently three active friends groups under the Joondalup Community Coast Care Forum (JCCCCF) umbrella.

At the Sorrento dunes (south) Mike Norman coordinates work on a high-profile 800-metre stretch of dunes from Marmion Angling and Aquatic Club north to Sorrento Surf Life Saving Club. During 2008, Conservation Volunteers Australia (CVA) and Woodside Petroleum employees helped community volunteers. Work included hand weeding priority species and planting local provenance seedlings provided by the City of Joondalup. In August 2008, the entire Human Resource Division of Woodside (50 employees) spent three hours 'blitzing' a degraded area south of the Sorrento Surf Life Saving Club. Eighty bags of weeds and rubbish were removed so the area is ready for planting in 2009. The construction of a lookout area and boardwalk is planned in 2010.

Rehabilitation areas near Ross Avenue are looking very good, with excellent natural regeneration occurring in conjunction with very high seedling survival rates. In 2008, more than 372 volunteer hours were expended on the Sorrento Beach (south) site. Financial assistance from Coastwest paid for two days of contractor hand weeding, and the City of Joondalup sprayed

along the edge of the shared path to control weed invasion from the eastern side.

In the Iluka/Ocean Reef area, where Dr Marjorie Apthorpe is the Friends group coordinator, an Envirofund grant funded plants and hand weeding in two degraded areas. Intensive hand weeding in the northern area was contracted out, as the City of Joondalup does not permit any Friends group member (or anyone contracted by them) to use herbicides. The southern area was 'tackled' by volunteers, with financial assistance from Coastwest to pay for contractor hand weeding. A City of Joondalup Community Grant of \$2,500 and some on-ground help from CVA helped with the continuation of rehabilitation work. The Friends group has held 11 community work sessions this year, and a faithful core of eight to nine people support watering and weeding days, with up to 18 volunteers on planting days. More than 307 volunteer hours were expended in 2008 and 500 bags of weeds removed.

In the Mullaloo area, Marie MacDonald and Marilyn Zakrevsky coordinated volunteer weeding and planting activities, with additional help from CVA. Nearly 500 seedlings were planted in the West View Boulevade and Korella Beach path-Oceanside Promenade areas during

July 2008. Fencing was installed, but 40 metres was stolen shortly after installation! A Coastcare grant of \$13,800 has been received for fencing, sand trapping, signage and seedlings along Korella Beach path to Key West Drive car park path for work during 2009.

Two committee members of JCCCCF attended the 2008 National Landcare Awards in Canberra, having won the State award (coastcare category) in 2007. Although it did not win the national award, it was a good opportunity to mix with volunteers and professionals from around the country doing some fantastic on-ground work.

JCCCCF is one of 34 participants in the Community Reference Group for the Ocean Reef Marina redevelopment project. JCCCCF has independently surveyed the flora of the proposed site in Ocean Reef and believes there are some important coastal heath communities in very good to excellent condition. It will examine the city's Draft Structure Plan for the site when released and submit views as part of the formal community consultation process.

*Contact Mike on 9448 1978 or [mike.norman@bigpond.com](mailto:mike.norman@bigpond.com) for more information.*



## GROUPPROFILE:

# Friends of Ellis Brook Valley



By John Bowler

**After the closure of Barrington Quarry, Ellis Brook Valley was left in poor condition, with degraded areas, a lot of rubbish and the threat that Sixty Foot Waterfall could become the next quarry. This threat was averted when a group of local residents successfully campaigned for the waterfall area to be the subject of a land swap. Following this, the Friends of Ellis Brook Valley was formed in 1992.**



*(From left) Heather Bowler, Rod and Rosemary Thompson and Marc Lane from the Friends of Ellis Brook Valley working to construct a settling pond. Photo – John Bowler*

Only 20 kilometres from Perth city, the delightful Ellis Brook Valley carves its way through the Darling Scarp and onto the Swan Coastal Plain to the east of Gosnells. Looking towards the valley from the plain, one first notices the large quarries to the north and south. However, on entering the valley itself the natural beauty and rugged grandeur of the valley is realised. Progressing further you can see the aptly named Sixty Foot Waterfall which, after winter rains, adds further drama. The wildflowers of the valley provide a varied and impressive display, with the peak season being from September to mid-November. The workings of Barrington Quarry, which closed in approximately 1962, now blend into the landscape to add further interest.

### Rehabilitating the valley

Initially, the Friends of Ellis Brook Valley, the City of Gosnells and the State Emergency Service worked to clean up the valley site. Progressively, the Friends group revegetated degraded areas by collecting seed, propagating and planting out. Another mammoth task was to control and contain various weed infestations.



*Sixty Foot Waterfall, Ellis Brook Valley. Photo – John Bowler*

The work of the Friends group continued with a diverse range of projects such as erosion control, aerial spraying to suppress the spread of dieback and walk trail and boardwalk construction. A former degraded gravel pit has been transformed into a native plant garden and picnic area, which was named Honeysuckle Hollow. Funding for these projects was largely provided by the Friends group applying for grants from Lotterywest, DEC and the City of Gosnells. The Rotary Club of Maddington also sponsored new barbecue and picnic facilities. It also assisted with planting as did local school children and the Cub Scouts.

Work to survey and document all the plants growing in the valley was started by Margaret Robertson and carried on by Heather Bowler. Heather sadly has now passed away. Heather worked closely with the Western Australian Herbarium and an Ellis Brook Regional Herbarium was established at the Western Australian Herbarium. With more than 500 species documented, it has demonstrated that Ellis Brook is a very significant wildflower location.

While supportive in the early years, the City of Gosnells had other priorities and all the energy and motivation for rehabilitating Ellis Brook Valley came from the Friends group. However, the city is now very active and involved. It has increased the area of its lease to encompass the whole valley. It has initiated an upgrade of the facilities, including some very stylish signage and an entry statement. The city has also constructed new walk trails and upgraded some existing ones. Some of these projects have been in partnership with the Friends group. The city considers the valley an asset to the local community and as having long-term eco-tourism potential.

The Friends group is now focusing on the parking area just below the falls – perhaps one of the last areas requiring improvement. Draft plans have been submitted to the council and it is again hoped a cooperative approach will yield a good result.

*The Friends of Ellis Brook Valley welcome new members. Please phone 9459 2086.*

# Resources

## Publications

### Tuart Dwellers (2008)

Jan Ramage. Illustrated by Helen Hickman. DEC, Perth. RRP \$26.95. A beautifully illustrated children's story book celebrating the diversity, colour and ingenuity of the natural world. "From the break of dawn to nightfall, the tuart is not as it appears. Leaves and bark, trunk and branches – all are places of pretence, traps and trickery." Includes 10 pages of fascinating facts.



### Brush with Gondwana

(2008) Janda Gooding. Botanical Artists Group of Western Australia. Fremantle Press. RRP \$60. A stunning and diverse collection of botanical artworks by M. Pieroni, K. Syme, P. Nikulinsky, P. Dundas, R. Erickson, E. Hickman and P. Leech. Tells the stories behind each artist's illustrations and reveals a rich and diverse record of WA's unique biodiversity.



**Southern Weeds and Their Control** (2008) John Moore and Judy Wheeler. Second Edition. Department of Agriculture and Food WA (DAFWA), Bulletin 4744. RRP \$22. Contains information for field workers on weed identification, control methods and herbicide recipes for both hand and broad-acre spraying. Contact DAFWA on 9368 3333 or email John Moore on [jmoore@agric.wa.gov.au](mailto:jmoore@agric.wa.gov.au).

## Website watch

### What does your garden grow?

Cooperative Research Centre for Australian Weed Management (Weeds CRC) (July 2008). An overview of the impact of weeds on our environment, where weeds are a problem, how weeds spread and the theory and practice behind control measures. Resources for the home gardener and for workshop trainers or weed professionals. Visit [www.weedscrc.org.au](http://www.weedscrc.org.au).

**NatureMap** is a free, easy-to-use website that moves us closer to a 'one-stop shop' for questions about WA's biodiversity. Visit <http://naturemap.dec.wa.gov.au>.

The **Atlas of Living Australia** is a five-year project funded under the Australian Government's National Collaborative Research Infrastructure Strategy and involves Australian scientific institutions and organisations. The goal of the project is to develop web-based tools to access a wide range of information resources, databases and images relating to Australia's fauna and flora. Email [Wolf.Wanjura@csiro.au](mailto:Wolf.Wanjura@csiro.au) or visit [www.ala.org.au](http://www.ala.org.au) for information and newsletters.

The **Baldivis Children's Forest** website has been recreated. New pages, more information and links. Visit [www.baldivis-childrens-forest.com.au](http://www.baldivis-childrens-forest.com.au).

### Bushland weeds: a practical guide to their management with case studies from the Swan Coastal Plain and beyond (2002)

Kate Brown and Kris Brooks. Illustrated by Libby Sandiford. Environmental Weeds Action Network Inc. A valuable resource text for the practical management of bushland weeds. This popular and now out-of-print text is on the newly updated website [www.environmentalweedsactionnetwork.org.au](http://www.environmentalweedsactionnetwork.org.au).

### National Animal Pest Alert

**brochures** on the Indian ringneck, house crow and common myna. Contains information on these invasive species, risks to agriculture and the environment and how to distinguish these non-native species from similar-looking native birds. Download from [www.agric.wa.gov.au](http://www.agric.wa.gov.au).

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