



Supporting homes for wildlife

Land for Wildlife (LFW) recognises and supports many community groups and private landholders in Southwest WA working to conserve bushland.

Inspired by a similar program, which began in Victoria in 1981, the WA scheme got going in 1997 after discussions with community groups.

"Conservation on private land and community managed land is so important," said Penny Hussey LFW Western Australian coordinator.

"It can provide critical habitat for flora and fauna, sometimes rare species and vegetation types. It can create corridors connecting with reserves so that species are more resilient in the long term by allowing movement and genetic exchange.

"It also helps to create more of the kind of landscape we'd all like to live in and the government can't do that on its own."

LFW gives advice and assistance in creating and conserving wildlife habitats for properties that may or may not be managed primarily for conservation. Participation is entirely voluntary, there are no fees and membership does not change the legal status of the property.

To qualify, your land must have good quality, intact habitat (full registration) or you must be undertaking rehabilitation to create habitat (interim registration).

Blocks of bushland should be 2.5 hectares or more (school bushland can be smaller) and not already managed by a Government Department. Approval of the land owner is necessary. Fully registered properties receive a LFW sign to put in a prominent place.

"We are able to visit properties, make suggestions and provide site specific information," said Penny.

"Often people have good intentions but lack information, expertise,



Warwick Senior High School students next to their 'Land for Wildlife' sign, and bushland fence at the school gates.

contacts and funding ideas."

Robyn McElroy, coordinator of the Friends of Warwick Senior High School Bushland, was pivotal in registering the 1.5ha jarrah/banksia/tuart woodland surrounding the School.

"Our registration pack was wonderful. It included maps, an aerial photo and a flora list," Robyn said.

"We are working on several suggestions from our site visit, including creating a herbarium, collecting seed, direct seeding, weed and rabbit control.

"With the help of a Lotteries grant we have also fenced the bushland to limit access tracks and sprayed non-native grasses. This has made an obvious difference to the bushland and lowered the fire risk."

The DOLA-owned bushland is administered by the Education

Department and looked after by the Friends group.


"We have our Land for Wildlife sign next to the school gates with a fluorescent light above it at night," she said.


"The bushland now gets more recognition from the community and it has added weight to our funding applications."

Robyn has also organised for interim LFW registration for her mother's property in Boyup Brook where she is busy fencing creeklines.

Almost 700 properties are registered with LFW in WA. Some 500 properties that have received property visits cover over 400 000 hectares and include farmland, school bushland, shire reserves, hobby blocks and golf courses.

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 We still have some rain about, but it is clear that spring is well and truly with us. The colours of flowers seem particularly intense this year and I hope you all get the opportunity to enjoy the wonders of our bushland.

 We have all been busy with the Bushland Care Day program which promotes bushland care to the community. It has also provided a welcome opportunity for Friends groups to get some valuable assistance with bushland projects. By the time the program ends on 14 October we will have sponsored 20 Bushland Care Days.


Many thanks to all the groups who willingly hosted a Bushland Care Day. Although it is a welcome opportunity to gain some assistance, it requires a lot of work and organisation on the part of groups, particularly small groups and your efforts are certainly appreciated.

Thanks also to AlintaGas for their generous sponsorship of the program and in particular to Selina Gates for her hard work in getting the stories into the paper to inform the community and welcome them along. Without your assistance we could not do it.


Many thanks as well to the great crew at Australian Trust for Conservation Volunteers - particularly Conrad, Ken, Megan and Scott (and let's not forget Megan's folks who have willingly "volunteered" to cook the lunch). Thanks also to the willing band of volunteers who turn up in rain or shine to assist with this valuable work.

Special thanks to Brian and Lois for their consistent support.

Finally, the program could not keep going without the help of Linda Taman whose knowledge and skill in bushland management and organising are very valued.

 Congratulations to AlintaGas for being the runner up in the *Australian Financial Review Magazine* national sponsorship awards for 2000. The Bushland Care Day program was nominated in the category of Science, Environment, Health and Education.

 Congratulations to the Environmental Weeds Action Network and the Australian Association of Bush Regenerators for a very successful workshop on bush regeneration held recently at Kenwick Community Centre. The workshop was attended by 35 local government staff, representatives of community groups and other land management agencies. Well done also to the Urban Bushland Council for a very successful workshop on Partnerships between Community Groups and Local Government. Let's hope we see many more of these type of workshops.

 Finally we would like to invite readers of the newsletter to the Ecoplan end of the year wind up which we are holding in conjunction with the Swan Catchment Centre (see 'end of year bush care celebration' article p.3). Make sure you keep Saturday 25 November free and join us at the Hills Forest centre.

Dieback working group continues

Sharon Lewis (nee Kilgour) has been working for the Dieback Working Group providing support to community groups and local governments over the past two years. Her contact expired in July and she moved back to Victoria. An NHT application has been submitted for a project officer for another two years (the outcome will not be known until at least November.) Meanwhile, the Dieback Working Group are still active and can be contacted via Ian Colquhoun on 9397 6813, John Nicolson on 9479 4808 or Kevin Vear on 9368 4399.

The Group's spray trailer is available for hire from the Kalamunda Shire depot, Raymond Rd, Walliston (9257 9999 or call John Nicolson). Injecting equipment is available from the Roleystone Dieback Action Group (Ian Colquhoun), Roleystone Hardware (9397 5643), Eastern Hills Branch of the Wildflower Society (9572 1697), Nature Reserves Preservation Group (9291 7480), Bassendean Preservation Group (9279 9913) or Friends of Talbot Road Reserve (9255 1490).

Copies of the booklet *Managing Phytophthora Dieback in Bushlands: A Guide for Landholders and Community Groups* are now available for \$5 (plus postage) from CALM, Como (9334 0333).

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'Ecoplan News is a quarterly newsletter of Ecoplan, a Department of Environmental Protection program to support community involvement in bushland conservation'.

Summer Ecoplan News

Forward your news, activities and regional reports for the Summer Ecoplan News by 1 December 2000. Please keep your regional reports under 250 words and articles as brief as possible. Send us your photos! Fax, email or write to Margo (see Ecoplan contacts panel on this page). Thanks to all contributors.

End of year bush care celebration

All involved in bushland care are invited to the Ecoplan and Swan Catchment Centre end of year wind-up celebration on Saturday 25 November, 10am to 3pm at the Hills Forest, Mundaring. Nyungar stories, a bush tucker demonstration, and fire, glue and string making activities will be part of the fun. Presenters will explore Aboriginal cultural heritage. Lunch is provided and camping overnight is possible. Bookings via Bronwyn Ryan on 9220 5300 (or bronwyn.ryan@wrc.wa.gov.au) are essential.

Celebrating achievement

Ecoplan will be ten years old in April 2001! Bush care has come a long way and bushland groups have grown dramatically and undertaken many, many successful projects. This will be our opportunity to celebrate achievements in bushland care. A function will be held for government delegates and community group members. We are looking for photos that show what has been achieved: perhaps before and after photos of bushland regeneration or centre or nursery construction. Please post them to Margo at Ecoplan (include a note giving Ecoplan permission to use your photos in displays, and captions). We greatly appreciate your participation in helping us celebrate! Photos will be scanned and returned promptly.

What do you need to learn?

Next year's SCC/Ecoplan/GA(WA) bushland workshops and seminars are currently being planned and we need your input to ensure that we are meeting your needs. Whether you are new to bush care or not, if you have any ideas on what topics you or your bushland group would like to gain more information, please call Bronwyn Ryan on 9220 5300 or Margo O'Byrne on 9222 7052. Your feedback is appreciated!

Learning opportunities

There are plenty of opportunities to learn about bushland care over the next few months. Here are some highlights (meetings and contact details are found in the What's On section of this newsletter).

Two Swan Catchment Centre/Ecoplan/Greening Australia (WA) seminars remain this year. *Seeking sponsorship* is the topic on 7 October and *Aboriginal cultural heritage* is on 25 November (this will include the SCC/Ecoplan Christmas function, see the 'Ecoplan end of year celebration' article.)

The last Australian Association for Bush Regeneration (AABR) seminar for this year is on *Dealing with drains in bushland* on 8 November.

Kate Brown from Environmental Weeds Action Network (EWAN) is continuing her bush regeneration training sessions at Shenton Bushland in Shenton Park on the third Thursday of the month. Kate is continuing bush regeneration at other sites with Friends groups. Although these are not specifically training sessions, anyone is welcome to join in.

On 7 October EWAN is hosting a workshop on controlling the nominated weed of the year: *Euphorbia terracina* (Geraldton carnation weed) for local government representatives and community groups.

Bush regeneration courses by Apace in North Fremantle continue to provide a solid basis for bushland carers. The next one is from 16 to 19 October. Apace are also running three free comprehensive three-day seed collection courses (23, 24, 25 October, 13, 14, 15 November and 4, 5, 6 December).

Rockingham Regional Environment Centre is holding a wide range of environmental workshops including bird identification, bush care, attracting frogs and butterflies to your garden, also straw bale building, organic gardening and permaculture. Please register your interest so that firm dates can be set. Call 9591 3066 or email rrec@southwest.com.au.

Fremantle Maritime TAFE is presenting a *Coastal Planning and Management* course, funded by Coastwest Coastcare over four Tuesdays starting on 17 October, with two Saturday field trips (40 hours in total). The course will look at coastal processes, planning and management, sustainable development and national and international obligations in the coastal area. This a pilot course, and further course modules are planned. For further information call Neville Parminter, Fremantle TAFE on 9239 8045.



Participants in the SCC/Ecoplan/GA(WA) fungi workshop, Falls Park, Parkerville bring their collections to workshop leader, Neil Bougher.

On the Swan Coastal Plain interest from community groups is growing with six 'friends' groups and seven schools registered.

LFW employs two full-time and eight part-time extension staff distributed across the Southwest, including Perth, Mundaring and Busselton regions.

The quarterly LWF members newsletter is full of stories and snippets on nature conservation and ecological research. Wildlife notes on creekline revegetation, stream corridors for birds, nest boxes for wildlife, seed collection, encouraging possums and encouraging bandicoots are available free to members and nonmembers. Booklets on creating a local herbarium, managing granite outcrops, conducting a fauna survey and managing wandoo woodlands are available at a small cost.

The scheme is funded by CALM (two-thirds) and the Natural Heritage Trust through Bushcare (one-third). For further information on registering land call Claire Hall on 9334 0427.

Weedbuster Week 8-15 October 2000

Many bushland and other groups have registered their weedy activities during Weedbuster Week 2000. Some of these are listed in our What's On calendar. The most up to date listing can be found at www.weedbusterweek.com.au or by calling 1800 899 444. Join in an existing activity or add your activity to the register by calling Sandy Lloyd on 9368 3760. Be a part of highlighting the weeding work done right across the country!



The GST maze

Charity Pack: A taxation guide for charitable institutions and funds is a useful reference for conservation groups and available from the Australian Taxation Office on 13 24 78. Community environment groups should register as a charity so that they will not be taxed on income like donations and grants. For help on GST queries call Bronwyn Ryan at the Swan Catchment Centre on 9220 5300. Bronwyn is planning a seminar on preparing Business Activity Statements soon.

NHT funding reminder

It's nearly time to starting thinking about Natural Heritage Trust (NHT) grant projects again. The next round of NHT funding is scheduled to open in late November and applications will probably be due by late February. Community groups and government agencies are eligible. Keep in mind that on-ground works are a high priority, grants are dollar for dollar (in-kind work and donations can be included), and making sure your project is part of regional strategy, and/or management plan for the area strengthens an application. Call 9325 0000 for further information or to register for application forms and details.

Keeping track of groups

The Environment Centre of WA is compiling a database on environment groups. Groups that would like to be included please send your brochure or 150 word profiles and contact details to Barbara Rose, Environment Centre, 1st Floor, 10 Pier St, PERTH 6000, or barbara@ecwa.asn.au

Groups will feature in the Environment Centre Newsletter from time to time.

The Centre will soon update their *Community Resource Guide* which lists some of the larger community environment-related organisations in Perth. Changes or additions are due by 31 October. An electronic version of the 1999 Guide is available at www.iinet.net.au/~ecwa/resguide.html

Recording volunteer effort

by Bronwyn Ryan, Swan Catchment Centre

Volunteers often put a lot of time into making grant projects work. Some funding bodies require that groups keep records of volunteers' hours (often termed 'in-kind support'). These records are also a useful way for groups to promote the 'financial worth' of their projects to the land manager with whom they work in partnership to manage a piece of bushland, river foreshore, wetland and/or an entire catchment. They may also serve to give community groups a bargaining tool when seeking resources and/or sponsorship.

Natural Heritage Trust (NHT) grants require volunteer hours costed at \$15 per hour for non-specialist skills and \$25 per hour for specialist/technical skills (you need to justify the use of the specialist/technical rate). Other grant bodies are requiring similar rates, but check with them first. The NHT rate for specialists, such as botanists, is very low. Ask your consultants what they are usually paid. If your grant body does not stipulate the rates you should use your consultant's charge. This is a better estimate of what the job is really worth.

Keep a record of volunteer hours for each project. Set up a log (in say, an exercise book) with columns to record names of volunteers, hours of work

and a description of the work done. For example, one record might read: 10 people planting two hectares of native plants at site A, 7 hours per person. Don't forget to include a column to record the cash value equivalent of the in-kind support. In the above example, assuming that all people participating have non-specialist skills, the cash value of the in-kind support is \$1050! This represents a huge financial benefit for the land manager and the wider community.

It is critical that you record all in-kind support. Remember that the volunteer hours spent, for example, attending meetings, writing and distributing newsletters, occupying displays, coordinating workshops and tours, applying for funds and replying to correspondence are just as important as those hours spent doing on-ground work. (These are, however, not eligible to be included as matching funds in NHT applications.)

The Swan Catchment Centre can provide groups with a paper copy of a Volunteer Hour Recording Sheet proforma and can also supply your group with a computer disc that contains this information on an excel spread sheet. Call Bronwyn Ryan on 9220 5300 if you would like a copy. The Centre can also assist groups with aspects of book-keeping.

Ecoplan Econotes: On the orchid trail

Information and photographs from Andrew Brown, CALM

The curious shapes and colours of delicate orchids are seen in local bushland from August to October (some between April and December). Universally-appealing orchids are one of the three largest groups of flowering plants in the world. Around 400 species are found in the southwest of WA and all of these are ground orchids (some tree orchids are found in northern WA). There are often many species in small bushlands (eg 50 species in Kings Park).

Like grasses, palms and lilies, orchids are monocotyledons. They also have three petals and three sepals (two of these often look a lot like petals). The third petal is usually modified into a lip or labellum: a kind of landing pad for pollinating insects.

Manipulating the pollinators

The beautiful and weird range of flower shapes reflect the cunning ways that orchids use to attract their pollinators. A small number can self-pollinate (eg beard orchids and most mignonette orchids). However, most orchids are cross-pollinated by insects: wasps, gnats, beetles, flies and bees. Bright colours help attract bees and beetles. Some orchids offer a feed of nectar or pollen (eg mosquito orchids or red beaks). Others pretend to offer a feed with 'false' pollen (eg some sun orchids like the blue lady orchid).

Some orchids entice pollinators by mimicking the appearance of other flowers with a good pollen store that bloom at the same time. For example, donkey orchids look similar to native peas, some leak orchids resemble grass tree flower stalks and the blue lady orchid mimics the native iris.

With some species, a careful arrangement of flower parts and a lip or labellum that moves when touched forces insects to come in contact with pollen and the orchid's stigma. The flying duck orchid and species in the greenhood genus (shell, snail, jug and bird orchids) have these kinds of mechanisms.

The lips of hammer orchids resemble a wingless female wasp and when the male wasp attempts to pick up the fake female wasp he is forced to pick up or deposit pollen. These orchids also emit



Snail orchid (*Pterostylis nana*), in the green hood genus.



King leak orchid (*Prasophyllum regium*) found in swamp in the South West, including Swan Coastal Plain.



Pansy orchids (*Diuris magnifica*; in the donkey orchid genus).



Slender hammer orchid (*Drakaea gracilis*) with pollinating wasp.

a smell similar to that of a female wasp to attract the males (generally not detectable by humans). Orchids are often pollinated by a range of insects, but many that rely on smell as a sexual attractant typically have only one pollinator (these are usually unobtrusive and a dull green or brown).

Hitching up with fungi

All orchids rely on fungi for much of their food and on photosynthesis (converting energy from the sun) for only a small amount. Most orchids have only one leaf and it's usually small and insignificant. Orchids use chemicals to digest the tips of fungi threads attached to their underground structures. Many species have one fungus that they are particularly successful with, but it's not a mutually beneficial arrangement. The fungus doesn't acquire carbohydrates made by the orchid as it does with many plants.

Waiting for their time

Southwest orchids all die back to small underground potato-like tubers to survive the long, hot summer and resprout after autumn rains. Some don't resprout until the conditions are right, so you may find a large patch one year and only a few flowering in the same place the following year. Large colonies often are the result of a single plant cloning itself by producing many underground tubers (eg many greenhoods, donkey orchids and red beaks). Half of South-West orchids flower profusely in winter/spring following a hot summer fire and some of these flower only after such a fire.

Orchids have declined from trampling, clearing, grazing, weed invasion and frequent fires, particularly if they occur when they are flowering. Stick to the paths and do not pick them!

Common names have been taken from:

Hoffman N and Brown A (1998) *Orchids of South-West Australia* (second edition with suppl.) University of WA Press, Nedlands, Western Australia.

The WA Native Orchid Study and Conservation Group have a members newsletter, hold regular meetings and country and metropolitan field trips. For information call Noel Clarke (9276 1235) or Tom Blinko (9279 3765).

Central Region

Planting in South Perth

by John Feldman

Local community members have been assisting the City of South Perth in planting native species over the winter months. In June, a range of shrub and tree species were planted around the compensation basin in George Burnett Park, Karawara. This included some melaleucas planted on the artificially-created island. Sedges had previously been planted to help strip nutrients from water that flows into this basin from the Collier Park Golf Course and the new subdivision in eastern Karawara. Later this year the mayor of South Perth will officially name this revegetated compensation basin as 'Lake Gillon' in recognition of the adjacent road and a patch of remnant bushland that has now been cleared.

In July there were three native planting activities at the Goss Avenue bushland, Karawara. Sedges were planted along a Water Corporation drain that exists as an easement through the lowest part of the bushland. Shrub and tree seedlings were planted in the 'banksia woodland' section of the bushland. Lastly, Joan Boardman organised the planting of some 100 seedlings of five or six different species. She grew these over summer in her backyard from seed collected from the Gillon Street bushland before its destruction. The specimens were some of the healthiest I've seen. Well done, Joan!

Recently Mark Taylor left the City of Melville and returned to the City of South Perth to take up the position of Manager, Parks and Environment. Together with our existing environmental officer, Sean Smith, this duo should make a positive impact on our parks and bushland.

For further information call John on 9368 3739 (w) or 9450 5661 (afh, after 6pm).

Growing natives with charcoal

by Eddie Knott, Friends of Hollywood Reserve

In bushland 12 km north of Muchea I noticed that a wonderful wide range of plants germinated in the season after an intense fire in January 1995. During the second season after the fire, germination dropped dramatically, except in a few areas all within a metre of burnt logs with significant adjacent charcoal/ash.



Ecoplan/ATCV/Alinta Gas Bushland Care Day, Hollywood Reserve.

In late 1997, I placed seeds of *Eucalyptus calophylla*, *E. todtiana*, *Banksia attenuata* and *B. menziesii* close to a large log and broke off charcoal pieces from the log to cover the seeds. A significant number of these seeds germinated in 1998.

As a consequence of my observations, I transferred experiments to pots: layering potting mix, then seeds and a final covering of charcoal from a domestic wood-fired heater (the owner of the home heater had used dry jarrah blocks as firewood).

Compared to previous years efforts, I noted a very marked improvement in the germination of the seeds in pots for *Eucalyptus calophylla*, *E. todtiana*, *E. ficifolia*, *Banksia attenuata*, *B. menziesii* and *Hakea costata*. Six out of eight seeds of zamia palm taken from emu droppings germinated. It was interesting to note that the roots of the plants were through the bottom before the green seed-head was fully open!

This year I have direct seeded 20 or so small seed beds in Hollywood Reserve and covered the seeds with domestic charcoal and ash. Despite the late winter rains, seedlings such as *Eucalyptus calophylla*, and *Kunzea ericifolia* have germinated. Although it is early in this experimental work, the results to date seem highly encouraging for charcoal dust to be used as a stimulant for germination.

For further information about the Friend group call Trish and David Hewson on 9386 4476.

North West Region

Fungi species amaze

by Karen Clarke

The Friends of Warwick Bushland hosted a very successful FungiMap workshop on 23 July lead by Katie Syme, WA coordinator of the FungiMap project. People from right across Perth, including several of Perth's fungi experts, attended. The Friends were amazed to find over 90 species of larger fungi after a couple of hours of collecting, including seven FungiMap target species. FungiMap aims to document distribution patterns, rarity and factors determining the distribution of 100 easily recognised species across Australia. Our records will be sent to the Royal Melbourne Herbarium and included in this study.

The Friends are planning to follow the lead taken by the neighbouring Warwick Senior High School Bushland and facilitate the registration of the bushland with Land for Wildlife. We are also busy putting together a weed herbarium and a weed management strategy.

For further information call Karen or Mark on 9342 8482.

Strategic weeding at Star Swamp

by Christine Curry

Friends of Star Swamp Bushland have commenced mapping the severity of four of the main weed varieties found throughout the Reserve. This will help us to develop a plan of attack against these weeds which will include community weeding days, trial weed poisoning in selected areas and liaison with the City of Stirling to develop a weed spraying program. A small sample of weed-wand poisoning trials were conducted in 1999 on freesias and this seems to have been very successful. We also hope we can make a start on pulling up cape tulip bulbs this year, in conjunction with our lupin pulling days. The City of Stirling has maintained a veld grass spraying program over the past few years, with some success, and has also tackled the bridal creeper problem on the western side of the Reserve.

The Friends group continues to conduct a guided monthly walk on the fourth Saturday morning of each month. As well as this, the annual Spring Walk was held at the end of August. Spider orchids were found in abundance, donkey orchids were

also in bloom and a dozen or so jug orchids, rare for the sand plains, were discovered. A nocturnal walk is scheduled for 27 October (see *What's On* section for details of walks).

For further information call Christine on 9447 2983.

North East Region

FROGS green Midland

Midland FROGS (Friends Restoring Our Green Spaces) are focused on raising awareness of environmental issues, particularly in relation to Blackadder Creek and the 100 Year Floodplain in Midland. The group is concerned about some property and canal development proposals. Members have had several meetings with agency representatives and local authorities, including the recently officiated Midland Redevelopment Authority (MRA), to ascertain the progress of these developments.

FROGS also contributed to the fledgling Midland Community Forum, which provides a collective voice for community groups in the Midland area, especially those impacted upon by the MRA. The Forum will continue to push for greater community consultation and input into MRA processes.

Earlier in the year, FROGS distributed a concept plan, including drawings, of the Swan River 100 Year Flood Plain /Blackadder Creek Wetlands. The group would like to see the area as a riverside regional Park. The Plan received some positive feedback and sound advice, for example from the Nyungah Circle of Elders, and these will be included in a supplementary document to the Plan.

Due to lack of current data, FROGS applied for a grant to the Gordon Reid Foundation for Conservation to fund an 18 month study of the flora and fauna of the Wetland/Floodplain. In April, Birds Australia and FROGS held a bird watch activity to collect data for the Australian Bird Atlas. A surprising variety of birds including three tawny frogmouths, a barn owl, a black shouldered kite and a nankeen kestrel were recorded. At least 57 bird species have been recorded in the area. The group is also rehabilitating the Elvire Street Wetlands.

For further information call Francesca on 9250 3353 or piarctex@inet.net.au.

Rehabilitation and education at Bennett Brook

by Sara Winter

Bennett Brook Catchment Group (BBCG) have been busy over the winter season planting along the Brook. Volunteer teams, including school and TAFE groups and the Hyatt Care Team lead by BBCG project officer, Sara Winter, have been planting at five sites along the Brook from Whiteman Park to Clarrie Small Park in Caversham. In 2001, BBCG will be linking these sites together to create a 2.1 km rehabilitated corridor with help from Work for the Dole, Green Corps and others.

BBCG Community Education Officer, Jackie Wright, has been busy educating school children and running her Bandicoot Club. Jackie works with five schools in the catchment teaching water quality monitoring, macroinvertebrate sampling and environment issues. The Bandicoot Club is run for children aged 6-12 years and enables the members to get up close and personal with Bennett Brook.

BCCG discovered salvinia, a very dangerous water weed, in Thornbrook Park near the Brook. The Group have been working with the City of Swan and Agriculture WA to remove it. This unwelcome surprise came not that long after another serious water weed, water hyacinth, was found in the Brook earlier this year.

The Catchment Management Plan for Bennett Brook's catchment compiled by BCCG Catchment Coordinator, Linda Taman, has been released for public comment.

For further information call Sara at the Bennett Brook Environment Centre on 9377 0444.

Hills Region

Eastern Hills news

by Jenny Johnson

The great winter rains kept falling, extending our planting season. Wet areas and streamlines will probably be planted during spring when the stream flows have declined. Long term weather gurus have predicted rain will continue well into the year. All planting should be established by the time summer arrives.

In Mundaring, many reserves are in good condition and now require little more than weed control and rubbish removal. Groups with serious weed or water flow problems have applied for grants through NHT or

SCULP.

Linda Raynor is now the Swan-Mundaring Landcare Officer, replacing Liz Weston who has joined the staff at the Swan Catchment Centre (SCC). It is great to see Liz as part of the SCC team and welcome aboard Linda!

The River Restoration Workshop in October, conducted by SCC and Water and Rivers Commission, will be based on Jane Brook in Parkerville, John Forrest National Park and Nyaania Brook in Boya. Local groups hope to gain some valuable advice on how to tackle some of the many problems with these streams.

At Brookside Park in Parkerville, Midland TAFE students and Parkerville Primary School students have continued revegetating drain lines and stream lines along Jane Brook.

Major earthworks have taken place at Lion Mill Creek in Mt Helena prior to ongoing weed control and planting. As well as a chuditch, a native water rat complete with tunnels has been seen here!

The second phase of a blackberry eradication program has been carried out at the quarry on Bugle Creek in preparation for spring planting of wetland species.

Anne Harris has undertaken floral surveys of many of the Mundaring Shire's reserves. A herbarium has also been produced and is available to community groups.

A Lotteries grant has secured local groups a covered trailer complete with whipper-snipper, and hand tools such as loppers, spades, pruners and buckets. The Hovea Bush Regenerators will be accepting the delivery.

Lets hope the rain continues - happy planting!

See *What's On* section for details of bush care activities in Hovea.

For further information call Jenny on 9295 4467 (after 6pm).

Goals achieved in Darlington

by Susan Young, Friends of North Darlington Reserves

An EcoPlan/ATCV/AlintaGas Bushland Care Day was held at the reserve on Ferguson Rd, Darlington on 23 July. After our submission was accepted we had an initial meeting to look at the site and take some publicity photos. AlintaGas took care of the publicity and EcoPlan sent us posters to put up.



Ecoplan/ATCV/AlintaGas Bushland Care Day, North Darlington.

All this publicity was most successful. On the day, we had a total of forty-one helpers. We were joined by a cub pack from Midland, a group from the Cloverdale Scouts, about ten ATCV volunteers, Darlington Friends members and locals from the immediate neighbourhood.

With all these helpers, we accomplished everything we set out to do. The tagasaste was almost eradicated and we tackled other exotics. Herbie Titelius came along to advise us on the clearing of bamboo from our beautiful creek. The creek has been partly cleared and native reeds and grasses were planted. We all also picked up the never-ending rubbish.

A BBQ lunch was provided and ably cooked by Shirley Lace, the cub leader from Midland. We were fortunate that it was one of the few fine days in July. It was interesting talking to the ATCV volunteers about other projects they have been involved in.

For further information call Susan Young 9299 7354

South East Region

Dieback control success at Ellis Brook

by Heather Bowler

In July, the Dieback Management Plan for Lots 1-3 Rushton Road produced by the Dieback Working Group was accepted by the City of Gosnells. We are now able to tackle the task of fully implementing the recommendations included in the report.

The original dieback survey recommended some treatment that was completed early in the year. Results from aerial spraying of the heathland for dieback in 1999 are looking very promising. The monitoring sites show an improvement in several

species and the main dieback front has not moved.

A Green Corps team has just completed an upgrade of part of the Falls Walk Trail. They put in water bars and steps and also direct seeded and revegetated along the edge of the track.

For further information call Heather on 9459 2045.

The Serpentine-Jarrahdale team

The Serpentine-Jarrahdale Community Landcare Centre in the centre of Mundijong is a place where the local community is encouraged to drop in for assistance on land, bush and river care issues. The Centre is in its third year and there's currently a team of five staff.

Cathy Lyons is the Landcare Development Officer and she coordinates various landcare and awareness activities and guides the Serpentine-Jarrahdale Community Catchment Plan. She is also establishing perennial pasture and salinity trials and river restoration works.

Jody Neiman, the Bush Rehabilitation Officer, helps community groups and the Shire with on-ground bushland conservation. Leah Martin is a Landcare Trainee and she assists with activities including on-ground work by the community, whilst also coordinating the regional herbarium and community seed store.

Tim Ryan is a Weed Strategy Officer assisting the community, Shire and LCDC implement the Shire's Integrated Weed Strategy.

Jason Mackay, the Dirk Brook Catchment Project Officer, manages a partnership project between government agencies, the community and the LCDC to implement best management practices for drains and waterways on the Swan Coastal Plain.

For further information call the Centre on 9526 0012 or email calyons@imet.net.au.

Bunbury Region

Airing your views in Bunbury

by Bernhard Bischoff

Now is the time for anyone interested in biodiversity and conservation in and around Bunbury to make their comments known. There are two important opportunities. The Greater Bunbury Regional Scheme (Draft), released by the

West Australian Planning Commission in August is open for public comment for three months. As this will become the statutory planning document for the foreseeable future, we must take advantage of this opportunity.

The second opportunity for comment has been presented by The Bunbury City Council, which has begun, in their words, "an era of environmental management". Public submissions are invited until 30 September on Bunbury's natural environment for the first stage of an Environmental Management Scheme (EMS).

Whilst there are a great variety of issues, it can be argued that biodiversity and conservation of remnant vegetation are the most pressing. Bunbury is lucky to still have substantial and regionally significant original vegetation stretching 7km through Southern Bunbury from the ocean to the Preston River. The two major reserves: The Maidens and Manea Park, together with corridors of remnant vegetation, represent a cross-section through the western Swan Coastal Plain which is quite unique. It includes the three key dune formations (Quindalup, Spearwood, Bassendean sands) and Pinjarra Plain alluvium soil type. Given the extent of vegetation fragmentation on the Coastal Plain, all remnant vegetation in this area needs to be carefully considered for retention and conservation.

I believe that the sections of the corridor that can and need to be wider than presently planned include The Maidens and Manea Park; Shearwater and Usher Tuart Forest, College Grove, and the area between Manea Park and Preston River; and areas north and south of the airfield, and between the South Western Highway and Preston River.

For further information call or fax Bernhard on 9791 4113.

Leschenault Nursery activities

The Leschenault Community Nursery has delivered over 100 000 plants within the Leschenault and Geographe Bay catchment areas and is now in recession until the middle of October when seeding for the new season will begin.

In November, the management committee will run two seed collecting workshops for locals (25 and 30 November, see What's On section for details.)

Call Shirley on 9795 7181 for further information.

Group Profile: Friends of Gingin Brook



Greencorp team: (left to right) Hayley, Danielle, Sam, Grant, Katherine, Nicky, Jeevan with supervisor Darren Davies (back right) and Richard and Pauline Diggins (centre).

Adopting the Brook

Fifteen years ago Subiaco residents Pauline and Richard Diggins came across the run-down Gingin Railway Station they remembered having seen many years before on picnics with their family. The Gingin Council told them that there wasn't money to restore it, so the Diggins agreed to do it and in return the Council and Westrail gave them a 21-year lease and the use of the Station as a country get-away.

Some years later, after the main restoration work was completed, the Diggins realised that they also wanted to do something about restoring the natural environment, particularly the Gingin Brook which seemed choked with weeds. The 58km Brook is 500m from the Railway Station and runs through the town.

"The Brook is so special: it's the heart of the town. It has social, economic and environmental significance and is listed on the Register of the National Estate," Richard said.

Restoration work begins

The Friends group, including city people, locals, Shire employees and Diggins family members, was formed in 1997 to care for the Brook. With the help of Jonelle Black from the Water and Rivers Commission, Tom Mitchell from Agriculture WA and support from the Gingin Land Conservation District Committee (LCDC), a \$71 000 Natural Heritage Trust (NHT) grant was awarded to the Friends in 1998 for a three-year restoration project. This focuses on an area within the town

boundaries, adjacent to a large picnic area called 'Granville'.

"The idea was to set up a demonstration site," Richard said.

"We hoped to show what can be achieved and encourage landholders in the area to restore their parts of the Brook."

The project includes protection and regeneration of native vegetation, revegetation, fencing, constructing an environmentally-friendly boardwalk, and producing leaflets and a history of the Brook.

Support and challenges

"It's been quite a learning process, even in terms of the language used in restoration," Richard said.

"It takes a while to build up knowledge and contacts, but it's worth it.

"Having the confidence to ask for help from experts and seek the best available advice has been very important.

"Getting going, keeping up the momentum, getting new members involved and increasing awareness of the damaging weeds and what is environmentally good in the area have been our biggest challenges."

The group have held several tours, seminars, guided walks and field days, often with visiting experts.

Removing the stubborn weeds

The first year of the NHT grant focused on removing 1600 wild fig trees, 60 Japanese pepper trees, arum lilies and taro. Initially the arum lilies

were slashed by hand-held hoes. This reduced the size of regrowth, but not the number of plants. Kate Brown (Environmental Weeds Action Network) has been investigating the impact of various removal treatments in experimental quadrats.

During 26 weeks in 1999/2000, an enthusiastic Greencorp team made an incredible difference removing woody weeds, watsonia, virginia creeper, blackberry, bamboo, canno, taro, bridal creeper, arum lily, morning glory and honeysuckle. They also erected 500m of fencing to protect plantings of paperbarks, sedges and flooded gums and assisted in constructing the boardwalk.

Community links

The Friends have many supportive links with the local community including the Shire and LCDC. Gingin Scouts and Cubs have lent a hand weeding. Gail Anderson and 30 of her students at Gingin District High School have established a seed bank and nursery at their School. Friends member, Sue Gray, oversees the management of this nursery and keeps up with the Friends' planting needs. Local historian, Hazel Dewar, (and the Friends) are undertaking a frog survey at the Brook (linked to the state-wide Frogwatch program).

"It has also been encouraging to see some of the work done by the local farmers - some of our unsung heroes," Richard said.

"Overall, it's been fantastic. I feel like we are making a contribution and I am also a lot fitter and healthier!"

Contacts

Richard and Pauline Diggins
9381 1529.



The Gingin Railway Station the Diggins adopted.

Resources

Southwest hakea book

A new book by Jennifer Young, *Hakeas of Western Australia: Botanical Districts of Irwin and Darling*, looks at hakeas found in coastal areas from Shark Bay to Albany. This book is the second in a series (the first was on Wheatbelt hakeas) and it will be of particular use to those interested in revegetation and wildflowers. There are colour photos, line drawings and descriptions of 60 species. It costs \$25 (including postage) and is available from J Young, PO Box 576, West Perth 6872 or by calling 9242 2207.

Weedy publications

The draft WA Government's Weed Plan, a strategy to reduce the impact of weeds on the environment, human health and agriculture, developed in consultation with the community, was released in July and the public comment period closes 29 September. If you would like a copy call Agwest on 9368 3729 or visit www.agric.wa.gov.au/programs/app/swp. They were distributed to most local libraries.

A new text book on integrated weed management for students and land managers called *Australian Weed Management System* edited by BM Sindel produced by the Cooperative Research Centre for Weed Management Systems is now available. Authors come from all Australian States. The book costs \$32.90 (plus \$10 postage) from RG and

FJ Richardson, PO Box 42, MEREDITH, Victoria 3333, telephone 03 5286 1533, or robffiona@pipeline.com.au, www.pipeline.com.au/users/robffiona.

Beyond Roads, Rates and Rubbish

The useful Environment Australia publication *Beyond Roads, Rates and Rubbish: Opportunities for local government to conserve native vegetation* by Carl Binning, Mike Young and Emily Cripps is currently out of print, but it can be downloaded from the web. See www.environment.gov.au (under 'publications', then click on 'Environment Australia', 'list of publications' and finally 'bushcare'). The 148 pages contain information on the strategies and mechanisms local governments can use to manage remnant vegetation. It is the fifth publication in the Conservation of Remnant Vegetation series, Research Report 1/99. The EcoPLAN library has a copy.

Swan Valley flora book

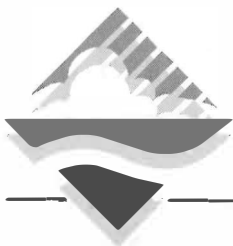
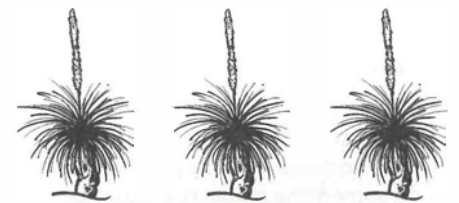
The book, *The Vanishing Floral Heritage of the Swan Valley* was launched in August and features detailed and colourful photos of many local plants collected during a survey of West Swan and Henley Brook. Compiled by Bevan Carter, Mollie Edgecombe and Janette Gathe, copies cost \$20 (plus \$2 for

postage) via Bevan on 9279 8777. Many have been distributed to local residents.

Bush restoration journal

A new journal, *Ecological Management and Restoration*, bridges the gap between ecologists' knowledge and the practical work done by bushland field managers.

The journal is published three times a year by Blackwell Science Asia on behalf of the Ecological Society of Australia and the Land and Water Resources R & D Corporation. It includes articles, technical reports, news items, book and web site reviews, conference abstracts and reports, and letters on ecological restoration and management. Individual subscriptions cost \$60.50 or \$54.45 for an electronic copy only for (the price is more for institutions). For further information and a free sample of the first edition take a look at www.blackwell-science.com/emr, email rae.smyth@blacksci-asia.com.au or call 03 9347 0300. The editor is well known bush regenerator, Tein McDonald (teinm@ozemail.com.au). Some complementary copies have been distributed.



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