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Newsletter of the Urban Bushland Council WA Inc PO Box 326, West Perth WA 6872 Email: ubc@iinet.net.au

Bush Forever Motion Finally Debated in Legislative Council

When the Bush Forever Amendment was finally tabled in Parliament it was the culmination of many years of science, policy development, negotiations and hard work. Unfortunately it also by no means protected each and every one of the 287 Bush Forever sites to the extent that we would like to see.

As such the Hon Alison Xamon MLC on behalf of the Greens moved that the Legislative Council:

notes the finalisation of the Bush Forever Metropolitan Region Scheme Amendment and the associated State Planning Policy 2.8, Bushland Policy for the Perth Metropolitan Area, and calls on the Barnett Government to go further and protect Perth's unique urban bushland in perpetuity by -

- Guaranteeing statutory protection for those same Bush Forever sites;
- Legislating, or introducing regulations, which assure an appropriate standard of management for those sites; and Appropriately funding that management.

Many people are surprised to find out that the Bush Forever Amendment which has been tabled does not actually guarantee the protection of Bush Forever sites.

What it does do is recognise Bush Forever areas and mark those areas on the Metropolitan Region Scheme map. Special considerations apply to developing in Bush Forever Areas as specified in State Planning Policy 2.8, but there is no guarantee that sites cannot be developed. Further, the value of these sites can only be maintained through active management – which requires funding. At the moment, sites that have been purchased by the Department of Planning are largely in the process of being transferred to the Department of Environment and Conservation for management – but there is no extra funding for their management.

Management of these sites is required to stop deterioration of the sites due to arson, rubbish dumping, off-road vehicles and the spread of weeds and feral species.

The purpose of the Greens motion was for the Parliament to address these concerns and for the Government to acknowledge that more needs to be done to protect Bush Forever sites from development and from deterioration.

The motion did not stipulate or suggest any particular time frame for progress to be made on these matters – only to acknowledge that progress does need to be made and for the Government to make a commitment to keep working on protecting and preserving our precious urban bushland.

Regulations to develop management plans and fund management activities are desperately required for those Bush Forever sites that are not lucky enough to have an active Friends group or be formally reserved as Parks and Recreation.

The members who spoke on the motion were Hon Alison Xamon (Greens) as the mover and in reply, Hon Sally Talbot (ALP), Hon Lynn MacLaren (Greens), Hon Helen Morton (Lib), Hon Ken Travers (ALP) and Hon Giz Watson (Greens). A number of other members interjected, not always in helpful ways.

Unfortunately, at the end of the debate every member of the Liberal and National Parties voted against the motion and that was enough to have it defeated.

It is important that the matter of protecting Bush Forever sites and also our remaining urban bushland not be left at this point. There is still an amendment to the Metropolitan Region Scheme Text in progress, that will define the purpose of the Bush Forever Areas marked on the Metropolitan Region Scheme Map. The text amendment is currently with the State Solicitor's Office to determine whether it is a minor or a major amendment.

The issue of funding for management activities is critical and ongoing and will need to continue to be pushed in Parliament. The Ministers and the Premier need to be reminded of how important our urban bushland is to the people of Perth.

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Editorial

Many studies have shown what we know intuitively: that having access to nature is fundamental to human health and wellbeing. *"Nature is in some fundamental way important for the human psyche, and as such it is really central to public health,"* says Roger Ulrich, Director of the Centre for Health Systems and Design at Texas A&M University.

Indeed every ward and treatment area at the new Fiona Stanley Hospital at Murdoch will have direct access to landscaped areas with plants. It has been shown that patients undergoing treatment or recovering get better quicker when their rooms overlook, and have access to, trees and planted outdoor areas.

Yet astoundingly the State Government has recently in November destroyed the small area of Banksia woodland known as Monash Bushland outside the cancer treatment centre at the QEII Medical Centre in Nedlands, despite a very public campaign by local residents, Friends' groups and the Urban Bushland Council to retain it. The articles in this edition tell the story.

The Master Plan for the QEII Medical Centre shows retention of the bushland, but alas in the rush to start building and cram everything on the one site, this natural asset was forsaken for a temporary car park to be followed by a new building for Ronald MacDonald House which is currently in Subiaco.

The heartfelt words of cancer patient Marie Carter on p6 were ignored by decision-makers in our health system.

And the Monash bushland *was* part of the regionally significant ecological linkage between Kings Park and Bold Park recognised in Bush Forever. This is yet another of the important linkage sites destroyed by inaction of the Environment Minister, the EPA and DEC. There are no legally binding policies or regulations in place to protect the well documented and recognised ecological linkages in the Perth-Peel region.

Furthermore there is no WA law or regulation in place that protects habitat of endangered species. Thus with no legal protection, the feeding and resting habitat of Carnaby's Cockatoo and many other species of birds, invertebrates and insects is being cleared patch by patch - the classic death of a thousand cuts. While Minister Marmion pays lip service to the protection of the endangered Carnaby's Cockatoo, his decisions and lack of interest in the decline of this species from uncontrolled clearing are remarkable.

Thus a key objective for the UBC in 2012 is the raising of community awareness of the plight of our iconic, but endangered Black Cockatoos, and the urgent need for new biodiversity legislation to replace the outdated and ineffective Wildlife Conservation Act 1950, so that these species and their habitat are protected and properly managed in perpetuity.

The generous grant from Lotterywest 2010/11 has enabled us to build a fantastic new website <u>www.bushlandperth.org.au</u> with the latest facilities such as on-line campaigning. This tool together with new promotional materials will be invaluable aids to all the local campaigns to save habitat - especially in Banksia woodlands - and to focus on the big picture and the need for new biodiversity legislation before the next State election in March 2013.

LAUNCH OF THE UNITED NATIONS DECADE ON BIODIVERSITY 2010-2020

On the 17th of December 2011, in a ceremony organized by the United Nations University, the Ministry of Environment of Japan and the Secretariat of the Conventions on Biological Diversity, *the United Nations Decade on Biodiversity* was launched in Kanazawa, Japan.

The United Nations Decade on Biodiversity builds on the achievements of the celebration of the 2010 International Year of Biodiversity. It aims at implementing the first Aichi Biodiversity Target of the Strategic Plan on Biodiversity 2011-2020, namely to ensure that by 2020 all the people of the world will be aware of biodiversity and its value.

Examples of other targets are:

- At least halve and, where feasible, bring close to zero the rate of loss of natural habitats, including forests,
- Restore at least 15% of degraded areas through conservation and restoration activities ,
- Make special efforts to reduce the pressures faced by coral reefs.

The Strategic Plan on Biodiversity 2011-2020, including the Aichi Biodiversity Targets were adopted through deci-

sion X/2 at the tenth meeting of the Conference of the Parties of the Convention on Biological Diversity, held in October 2010, in Nagoya, Japan. Australia is one of the signatories to the Convention.

This new plan will be the overarching framework on biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations system.

Mr Katsukiho Yokomitsu, Senior Vice-Minister of the Environment, Japan in his address to the Conference participants said: "Given the current status of biodiversity, it is incumbent upon us to endeavor continually and unfailingly to achieve the Aichi Biodiversity Targets. To pass on to our children the abundant natural blessings of this planet, we must harness the collective wisdom of humanity and begin and extend concerted efforts across the globe to create societies that exist in harmony with nature."

Call for active participation by all parties to the Convention and all stakeholders was made to find inclusive global solutions to address the complex problem of biodiversity conservation. For more information go to http://www.cbd.int/sp/

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New fungi project to discover the fibre-head fungi in Australia

Dr Neale Bougher and Dr Brandon Matheny have recently embarked on this exciting new fungi project after being awarded a 3 year Research Grant under the Australian Biological Resources Study (ABRS) National Taxonomy Research Grant Program. The project is entitled A systematic monograph of the Inocybaceae for the Fungi of Australia series. The Western Australian Naturalists' Club is to be congratulated for committing substantial co-funding that has enabled the project to secure this competitive award. Co-funding is a mandatory requirement for the ABRS grants. Neale and Brandon would not have been able to submit the project application, let alone win the grant, without the up-front commitment by WANATS. Dr Brandon Matheny is assistant professor at the University of Tennessee and leads another fungi project in conjunction with this, supported by the National Science Foundation (NSF) in the USA.



Dr Brandon Matheny and Dr Neale Bougher examining fungi specimen collected in Walpole in July 2011.

As you are probably aware, the Urban Bushland Council and the Western Australian Naturalists' Club together initiated the Perth Urban Bushland Fungi (PUBF) Project with the substantial financial assistance of Lotterywest in 2004 and both groups have strongly supported this community driven science project over the last 8 years. Members and the public have taken part in many winter fungi walks and workshops over this time, assisting state mycologist Dr Neale Bougher and the PUBF team with the huge and ongoing task of discovering local fungi. Dr Bougher has worked tirelessly naming and documenting both known and previously undescribed WA fungi discovered by community surveys of 57 of Perth's many iconic bushlands as well as opportunistic collections in other local areas.

A valuable result of the Fungi project is the online Fungi Field book, available at <u>www.fungiperth.org.au</u> which will continue to be up-



Inocybe cap, fibre-head mushrooms.

dated as the fungi project continues. The Fungi project has raised awareness amongst scientists and the community of the diversity and vital ecological functions of fungi in our local bushlands, to the extent that it's mandatory now when talking about biodiversity to refer to the "**3Fs**": Flora, Fauna and Fungi.

The new project will identify and describe all of the Australian species of Inocybaceae for the first time. A new volume in the ABRS *Fungi of Australia* publication series, a sister series to the *Flora of Australia* will be produced. So far there have been very few volumes in this Fungi series.

The Inocybaceae are mushroom-forming fungi commonly referred to as "fibre-head mushrooms" because many of them have abundant radiallyarranged fibres and/or scales on their cap. They are a frequently encountered group of fungi, but they are often dismissed as frustrating LBMs (little brown mushrooms) in the field. Based on studies to date, Neale and Brandon expect that Australia may have at least up to 100 species of Inocybaceae, the majority of which are likely to be unique to Australia. Most of the species have yet to be named or scientifically described.

Currently it is not generally possible to recognise and identify the Australian species of Inocybaceae encountered in biodiversity surveys. Hopefully the species descriptions and identification keys to be produced in this project will help de-mystify these fungi. It is anticipated that members of the UBC and the public will have opportunities to learn about the fibre head mushrooms by participating in community based field and lab-based workshops.

In the meantime, you may choose to take a look at the recently launched *Inocybaceae.org* web site - at <u>http://inocybaceae.org/</u>

MONASH AVENUE BUSHLAND ON A KNIFE EDGE

The massive redevelopment on the QE11 Medical Centre site in Nedlands will take around six years and will include a hospital for women, a new children's hospital, a cancer centre, a Telethon Institute for Child Health Research, Pathwest, a multistorey carpark, a Central Energy Plant, a Western Power sub-station and more.

In the QE11 Master plan 2010, the 0.6 hectare of bushland facing on to Monash Avenue is marked to be kept as bushland. In the Master plan, Monash bushland is described as one of the "key drivers' for the development of a significant 'enlivenment' supporting the functional activities on site".



View of Monash Avenue bushland

In 2007, when the structure plan was adopted by the Western Australian Planning Commission (WAPC), the WAPC advised that "the retention of Crawford Lodge and the adjacent remnant bushland in the core of this high accessibility activity centre would represent a lost opportunity." The WAPC invited the QE11 Trust to explore opportunities for the long-term use of the site. The WAPC was apparently unaware that the site was already used by vertebrates, invertebrates, trees, plants and fungi, as well as by people.

Since then, after the failure to get approval for temporary parking on Rosalie Park, and then at Highview Park, it was proposed that the bushland would become a temporary carpark. There was no mention then of a subsequent plan, but later it was proposed that a new Ronald McDonald House would be built on the site after parking there was no longer needed.

Members of a newly formed Friends of Monash understood that the planners had not allowed for a Ronald McDonald House in the plans (it was overlooked) and using the bushland for temporary car park was a cheap option. This may not be the case. However, the QE11 Trust chairman said that he was surprised when the proposal was first brought to attention at a late stage.

The EPA decided not to assess formally the impacts of the proposal on the bushland and appeals against this non-assessment did not sway the Appeals Convenor and the acting Minister for the Environment; Water, Minister Day. The Minister for the Environment; Water, Minister Marmion, stood aside from making a decision. All the grounds of appeal were dismissed by Minister Day.

In his conclusion he stated that "From the information available, it is reasonable to conclude that the site has value in its role as part of an ecological linkage between Bold Park and Kings Park." He recommended that the EPA advise the WAPC that "consideration should be given to the ecological linkage values identified in both Bush Forever and the Western Suburbs Greening Plan when considering the proposal; and that a site survey should be undertaken to identify the presence of and to quantify nesting hollows which may be utilised by Carnaby's Black Cockatoo and that any development of the site seeks to retain such trees where possible."

In a letter about Monash Avenue bushland, Minister Marmion said that "It must be recognised...that in balancing wider environmental, social and economic consideration, it is not feasible for all bushland and trees in the metropolitan area to be protected from development."

The Friends of Monash Bushland were working very hard to find solutions to save the bushland. If an alternative and acceptable site for car parking were to be found, this would give time to find an alternative site for the Ronald McDonald House, which has to be near the children's hospital.

With fortuitous timing the new Mayor, Max Hipkins, was elected to the City of Nedlands. The bulldozers were coming in to clear most of the bushland on Monday 31 October but Mayor Hipkins and one of the Friends of Monash Bushland saw an opportunity and the clearing was averted temporarily.

On the following Monday a public meeting was held and attended by around 130 people. This meeting was to discuss the possibility of having temporary parking on a cleared area of land which is part of the Hollywood Village in Monash Avenue, a retirement village. Many very angry people were at this meeting, and the anger was because of parking issues, mainly related to the QE11 developments. Residents have cars parking all over their verges and the streets are congested. One of the speakers was Lyn Jennings, a Friend of Monash Bushland. Lyn was unable to give all of her five-minute speech as the people did not want to hear it. They did want the bushland protected, they all said, but they were there to talk about parking.

The next night the City of Nedlands councillors discussed the proposal for a temporary carpark at the cleared part of Hollywood Village. A lady who had been staying at Crawford Lodge, adjacent to the bushland, for cancer treatment spoke to councilors at the commencement of the meeting. (Her moving speech follows this article). One of the items in the Council resolution is "Council advises the Ministers for Health and Environment of the community's strong desire for the Monash Avenue Bushland, as shown in the master plan for the QE11 site, to be retained in perpetuity." After over an hour of debate, the proposal to approve parking at the Hollywood Village site was passed 7/3.

The Friends of Monash Bushland had sent information to the CEO and to the twelve Directors of the Ronald McDonald House Charities Australia in Thornleigh, NSW on 11 October. Many UBC supporters and groups, as well as other community members including doctors and medical staff signed the letter to support finding a solution which would protect the bushland. We encouraged the Ronald McDonald House Charities Australia CEO and directors to meet us as soon as possible. There has been no response.

As we said in the letter;

"The QEII Administrators and the State Government seem unwilling to accept that there are intangible benefits in saving this bushland and that its preservation will have long term benefits that far outweigh its current value as a building site.

It seems it is up to those outside Government to take the lead on this and to do what is right to save our fast disappearing biodiversity as well as to consider the benefits of a natural space to those whose health is compromised".

We support the work done by Ronald McDonald House Charities Australia, and the work done by the Ronald McDonald House here in Western Australia. It is possible to find a solution whereby Ronald McDonald House can be sited close to the children's hospital and where Monash Bushland can be protected.

It is still possible, despite additional parking being made available, that the bushland could be cleared in the near future. Without the will from the government, the QE11 Trust, and Ronald McDonald House Charities Australia to seek a solution, the way to protect Monash Bushland, is extremely difficult. The speed and numbers of the community supporting the bushland is a good indication of how people feel about the bush.

A TRAGIC POSTSCRIPT

Dr D Russell-Weisz, Chief Executive of the North Metropolitan Area Health Service, of the Department of Health, Government of Western Australia, did two things on Monday 21 November. He sent a letter to the City of Nedlands and he sent in the chain saws to Monash Bushland.

In the letter he said that parking would not be going on the cleared area of the retirement village site. It would be going on Monash Bushland. Ronald McDonald House would be going on the bushland.

Around 40 trees, including jarrahs, marris, banksias, *Eucalyptus decipiens* and casuarinas were cut down that same afternoon around 3pm.



Clearing of mature trees at Monash Avenue Bushland in November .

The next day the men returned. The man's reply as to whether he was only going to be cutting down the stumps was; "I'm cutting them all."

QE11 Trust Chairman Steven Cole had previously told us that trapping for reptiles would be carried out prior to clearing.

Four people entered the site and the destruction had to stop. The police arrived. The four knew that they could not achieve more by being arrested and that the destruction would continue, whether arrested or not arrested. A point made by thos outside the fence was that those involved through doing nothing or through doing everything to reach this point were the ones doing environmental harm, rather than those facing the police. Heidi Hardisty and Lyn Jennings spoke passionately and movingly for the bushland.

Ignorance and insensitivity had won the day.



A futile attempt by concerned local residents to stop clearing of Monash Avenue Bushland for temporary car parking followed by a Ronald McDonald House.

Speech given by Marie Carter at the City of Nedlands Special Council Meeting held on 8th November 2011 in support of protecting the Monash Avenue Bushland.

I spent six weeks at Sir Charles Gairdner Hospital, living at Crawford Lodge, earlier this year, having treatment for cancer. My room with balcony was on the first floor and overlooked this bush block and I was totally amazed by its beauty – it was like a gift to me. I opened my curtains in the morning to see the light streaming through the trees and again in the evening at sunset, and would be filled with peace. Then during the day I would hear and see the birds coming and going. In every way it made me feel better.

I felt very glad too, at the time, that it was valued by the council or whoever was responsible for it. With so much building going on all around, it seemed all the more precious, like an oasis in a maze of concrete. Yes, we need buildings but we also need a connection with the natural world of which we are a part – this piece of bush is very much this.

When you look back at what you have achieved as part of this Council, I believe you will have a sense of deep satisfaction if you vote in favour of saving this piece of bushland. You will have given a special gift to the staff who work at the hospital complex and to the patients who come there for care and of course a place for the flora and fauna which are there, to call home.

As humans if we do not care for our environment we have a bleak future ahead.

As the photos demonstrate, despite the concerted community effort, clearing of the Monash Avenue bushland started in mid-November, with Police being called in to deal with protesters that managed to stop the development activities temporarily.



STILL NO CERTAINTY ABOUT THE FUTURE OF BUSHLAND REMNANT IN NOWERGUP By Sabine Winton

Day 1000 is fast approaching for the Lake Nowergup/Carabooda Valley Community in our plight to stop a proposal by WA Limestone to clear 7 hectares of bushland for a new limestone quarry and batching plant.

At this time of year it is fitting to reflect on our campaign and celebrate our successes. So where are we at?

Opportunities and hopes

We continue to build partnerships and raise awareness of our area. We have held two highly successful bushwalks through Lake Nowergup and Neerabup National Park. Most recently the Quinns Environmental Group hosted a walk from Butler to Lake Nowergup. It is extraordinary for many to realize that a walk from the urban fringe to the edge of Lake Nowergup takes less than 30 minutes. The wider community is starting to appreciate this natural jewel on its doorstep and the tremendous potential it holds as a regional open space servicing the Alkimos Region in one of the fastest growing areas in Australia.

Only last week we presented motions to the Annual Electors Meeting of the City of Wanneroo seeking action on realizing this potential. Our motions included requests for action on such things as better signage and access to Lake Nowergup and that the Yaberoo Heritage Trail be extended to incorporate the Lake Nowergup area. In the new year we hope to be able to make some meaningful progress on these aspirations. We hold great hope that the City of Wanneroo and the Department of Environment and Conservation (DEC) will share this vision and develop ways of improving the access to Lake Nowergup.

Threats and Challenges

You might remember that WA Limestone applied for a clearing permit back in April for its proposal for a quarry and batching plant adjacent to Lake Nowergup and Neerabup National Park. We had an overwhelming response from the community and with the continued support from the UBC, the DEC received over 100 submissions of opposition. At the time of writing the DEC has still not made a decision on this matter. This surely indicates that the proposal poses serious environmental threats.

WA Limestone also referred this matter to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC). The Department's response has been to make the proposal a controlled action. Further information and studies have been requested and WA Limestone must advertise and seek public comments before the matter is reconsidered.

These obvious and serious concerns expressed both by the DEC and the DSEWPC clearly validate our concerns about the appropriateness and need to establish a small limestone quarry in the heart of what is a unique, rural, heritage and conservation precinct. We continue to wonder what the opportunity cost is of allowing this small quarry. What price are we prepared to pay for what would amount to an insignificant contribution to limestone resources?

Given the serious concerns being raised by the DEC and the DSEWPC, we can't help but wonder how the City of Wanneroo came to the conclusion that this proposal had satisfactorily addressed all of their original reasons for refusing the development. A formal complaint has been lodged with the Ombudsman to try and get the answers.

Industrial Applications

More recently, you may have seen us in the media as we continue the fight against moves to industrialise the valley. Lime Industries who own the adjacent site to WA Limestone's proposed new quarry site has made an application to the City of Wanneroo to SUMMER 2011-2012 relocate its Osborne Park lime manufacturing operation to Nowergup.

As part of this campaign we noticed that the DEC had continuously reissued a license for lime manufacturing on this property despite no activity on site in over 10 years and despite the landowner not having any local government approvals. Our lobbying, on the back of over 100 submissions, has resulted in the DEC now refusing to reissue any license until the owner has development approvals. It's not a surprise that Lime Industries has now made an application to the City of Wanneroo for quarrying, lime manufacturing, lime kiln operation and a mining driver training facility. So now the ball is back in the City of Wanneroo's court. Here is where it is going to get interesting because the quarry proposed is even more insignificant in terms of size, is within 100metres of numerous residences, and lime manufacturing and a training facility are all not permissible uses in the current rural resource zoning. And of course this is all being contemplated on a site that is adjacent to Lake Nowergup and Neerabup National Park/Bush Forever Site 383.

WA Limestone and Lime Industries both mention the other in their management plans. In fact WA Limestone proposes to use an existing driveway on the adjacent property. We continue to hold fears that the overriding plans for these two sites might be for industrialization and concrete and cement manufacture to service the Alkimos region. We continue to have support from our parliamentari-

ans. Michael Mischin MLC recently tabled a petition calling for an investigation into the DEC's continuous reissuing of a lime manufacturing license to Lime Industries. Giz Watson MLC has asked questions in Parliament and presented a petition asking for an explanation as to how these sites were ever granted priority resource status in the State Planning Policy Basic Raw Materials 2.4. The City of Wanneroo and the Department of Planning has failed to show how these sites came to be given such designation given that there is no evidence to show that the due and proper process of consultation was followed in order to be granted such status. The community's questions in relation to the legality of such listings remain unanswered.

Our approach has been simple. We fight this madness every step of the way. We can only lose if we stop trying.

Group News Group News Group News

Friends of Ken Hurst Park

Ken Hurst Park (Bush Forever site 245) is an area of *Banksia* woodland in good condition in Leeming, adjacent to Roe Highway and Jandakot Airport. Some 250 species of native plants are known to occur within the Park, including a Threatened (Declared Rare) Plant, *Caladenia huegelii* (the Grand Spider Orchid), and it is a feeding site for Carnaby's Black Cockatoo (Threatened fauna).

Since 2005, the area of remnant bushland in the area has been significantly diminished by the construction of Roe Highway Stage 7. However, since the Friends of Ken Hurst Park became active in 2000, the City of Melville has fenced the park, rubbish has been removed, and old vehicle access tracks have been closed to the public. Although some planting of native tube-stock has been completed by volunteers over the last 5 or more years, re-vegetation of degraded areas has been very slow.



Banksia woodland at Ken Hurst Park

On behalf of the Friends of Ken Hurst Park, and in association with the City of Melville, Dr Eddy Wajon has been successful in gaining a grant of \$14,410 from the Department of Environment and Conservation's (DEC) Community Grant Program for re-vegetation of degraded areas, primarily tracks and edges, within the park. DEC are assisting by trying to organise topsoil and mulch to be supplied from Jandakot Airport from areas being cleared for commercial development. Planting of tube-stock will be done by a combination of volunteers and contractors in April-June, 2012, with watering by tanker proposed to occur over the first summer. Hopefully, with lots of plants and seeds, protection from desiccation, better natural conditions and water, more plants will survive and the area can recover from several years of drought and human disturbance.

> Russell Hall, Murdoch Branch of the Wildflower Society

Bungendore Park Management Committee continued its celebrating 30 years of caring for the park by its recent hosting of three events.

Twelve people attended the Digital SLR session on 8th October to hear our presenter Tony Harman discuss the software and techniques for focus stacking (combining multiple focal-length images into one), High Dynamic Range imaging (rendering of multiple exposure images) and panorama imaging. A few clicks of the computer mouse can provide some wonderful results!

Another bushwalk in the park was held on 16th October as part of the City of Armadale's spring bushwalk series. On one of the recommended bush trails, Armadale Wildflower Society members had placed temporary descriptive labels on many of the plants along the way.

The 9th annual Bungendore Bush Breakfast was held on 6th November. There were many new faces, as well as old friends, who enjoyed the fully-cooked breakfast courtesy of the Armadale Lions Club. This year our breakfast was followed by a recital of two poems and a tune from Keith Lethbridge, an outstanding bush poet and raconteur. Thanks to nearby Armadale Christian College for allowing us access to the school grounds due to the threatening clouds in the morning.

Kím Sartí

Wildflower Society (Armadale Branch) held a successful wildflower display at Armadale Central Shopping Centre on 23rd and 24th September. There was good interaction with the shoppers passing by, many of whom mentioned they were changing their gardens to growing local plants as they were concerned about water usage.

As part of our 50th anniversary celebrations, the branch donated 4 prizes at the Kelmscott Show for the best: native cut specimen, native potted plant, photograph and artwork. We were also allocated over 6 metres to mount a display of local named cut specimens. The feedback was very positive from the people who visited the Flower Pavilion. Over the CHOGM long-weekend in October, some branch members went to the Porongurup and Stirling Range area to visit the national parks and on one day met up with members of the Albany branch to visit Waychinicup National Park and Cheyne Beach area.

Now the warmer weather is upon us, we will be gearing up for seed collecting for propagation of seedlings used in local revegetation projects.

Group News Group News Group News

Nature Reserves Preservation Group is concerned over Loss of significant bushland in Forrestfield/High Wycombe.

Not many people outside of the Shire of Kalamunda might be aware that a significant area of a threatened ecological community is being scheduled for conversion from its current rural residential zoning to light industrial and that rezoning will see large amounts of bushland mowed down and most likely converted into areas of asphalt for truck parking.

The area in question is known as High Wycombe Stage 3 under the Kewdale Hazelmere Integrated Masterplan, It is the area bounded by Sultana Road, Milner Road, Poison Gully and Roe Highway. Stages 1 and 2 of this area have already been or are in the process of being developed and Stage 3 is next in line. As you can see from the map below, the area has substantial coverage of natural bushland in good condition that is already protected due to the widespread presence of rare, vulnerable and threatened species and should therefore remain intact.



Expansion of Forrestfield/ High Wycombe Industrial Area. From Shire of Kalamunda website.

Letters have been sent to the EPA and both the Federal and State Environment Ministers but we need all the support we can get to help prevent this development. It is ironic that under Bush Forever all bushland on the eastern side of the Swan Coastal Plain is supposed to be protected by the agreed presumption against further clearing of vegetation complexes in this section of the Plain, (Bush Forever Volume 1, page xiv), applied through the planning and environmental approvals process.

Stage 3 contains the threatened ecological community TEC 20a. Both the Forrestfield and Southern River vegetation complexes exist in the area and are already well below the target 10% protection. It is reasonable to assume that any flora present in nearby Bush Forever areas 45, 122, 213, 319 and 320, 386 may also be presumed to be in the area of interest. That includes three species of rare flora *Conospermum undulatum (R), Banksia mimica (R) and Macarthuria keigheryi (R); three Priority 1 flora, seven Priority 3 flora; and five Priority 4 flora.* Many of these are listed federally as well as in WA.

The habitat of *Conospermum undulatum* is being increasingly threatened due to the clearing of much of the airport land. A recent survey and possible reassessment of its status is being carried out by the Department of Environment and Conservation.

These bush areas currently comprise a substantial part of the wildlife corridor used by the resident quenda population. While there is a network of bridal trails in the area they have not been maintained. In addition, the linkage of Bush Forever Site 123 (Sultana Road) with Bush Forever Site 45 (Poison Gully) by wildlife corridors alone is not considered adequate. The area takes in part of Poison Gully which is a wildlife corridor. The Poison Gully watercourse also ultimately discharges into the Munday Swamp wetland. That wetland is a lake under the Environmental Protection Policy (Swan Coastal Plains) 1992.

The area is used extensively by migratory birds listed under the EPBC Act including rainbow bee eaters, three species of black cockatoo, and several species of egret.

The predominant soil type is Bassendean Sand over Guildford Formation (Qpb/Qpa: S10). Drainage in the area is compromised by that layer of laterite on average about 30 cm below the surface and so use of the area by trucks with the concomitant storage of fuels is a danger with respect to pollution of groundwater and of Poison Gully.

Residents of the affected area received a letter in September advising them that consultants have been engaged to conduct hydrological investigations of the area to support the Metropolitan Region Scheme and Local Planning Scheme Amendment Process. Water monitoring and flora and fauna surveys were also to commence in early September. Residents have been asked to sign and return a form permitting flora surveys of their blocks.

If things proceed according to the current proposal, this valuable area of bushland, originally planned in the 1970's, as a buffer between the existing light industrial area and residential properties on Maida Vale Road, will be lost forever.

Aíleen Reíd

Group News Group

In January the **Medina Residents Group** signed as partners with the Town of Kwinana in a grant application to the Federal Government's Caring for Country program. This grant application was successful and will provide for a range of bush care activities in the following financial year. On the 26th of June, 15 plus people joined the Town of Kwinana's Bush Care Officer in continuing the planting at the iconic Kwinana natural bush site. It's a pure gold moment to see families with their children fully engrossed in planting out a section and enjoying the catered picnic lunch when they're done. Recent changes to the area including significant fencing of the site by the Town of Kwinana, has seen the rubbish dumping decrease sharply.

Sherrí Bothma

Friends of Monash Avenue Bushland Around 1 October 2011, 115 trees and shrubs were cut down along Winthrop Avenue for the QE11 development (see photo below). The Minister for Health told us the trees were cut down for slip roads for development vehicles to enter the site. In addition a further 15 trees were cut down at the same time on the corner of Winthrop and Monash Avenues. The City of Subiaco had recommended that a very old jarrah tree with hollows and an old Banksia on this corner be protected. They were cut down and the corner lot is now a carpark.



Friends of Hollywood Bushland were contacted by Grill'd in Subiaco, who's Assistant Business Manager informed the Friends Group that they were to be the beneficiaries of the companies fundraising in November. As a very small group, they rely on donations. Most of those donations go on buying new plants each Spring.

Grill'd introduced a community donation program Local Matters, through which small local community groups benefit not only from the financial assistance, but also increased awareness of the local groups and charities in the local community. Each month three local groups are chosen.

MANAGING FOR HEALTHY FORESTS

"Managing for Healthy Forests" was the theme for a symposium held 21st October 2011 at Henley Brook. Hosted by the Centre of Excellence for Climate Change, Woodland and Forest Health (CoE), the symposium enabled scientists, environmental managers and community members to come together to hear of current research investigating the effects of climate change on our woodlands and forests.

Prof. Lyn Beazley (Chief Scientist of WA) gave the opening address and spoke of the world's hotspots, WA's forests and woodlands and Gondwanan linkages, introduced pathogens such as *Phytophthora* Dieback, introduced animals and the challenges of climate change. Lyn is an advocate of citizen science and also spoke of community group involvement citing Karakamia, Perth Urban Bushland Fungi project and Bungendore Park Management Committee as examples. She indicated that children should be invited to some sessions of symposia.

Giles Hardy (Director of the CoE) gave an overview of the Centre of Excellence and its research programmes in the woodland and forest declines – canopy tree mortality of Jarrah and Marri along with *Banksia grandis* and *Allocasuarina* (all ages and sizes) with subsequent increase in borers causing leaf drop and increased fire risk. Marri decline can be attributed to cankers causing death of the tree over 3–5 years. Giles compared human health with forest health where treatment is undertaken after diagnosis. "No action in the face of climate change is a decision that may carry the greatest risk" was a relevant quote.

Tom Lyons (Murdoch University) spoke of climate variability and change and long-term trends – there has been a marked decline in rainfall since 1974 resulting from more high pressure systems in winter and spring. There has been an increase in the number of frost days and duration of the frost (due to clear skies, increase in radiated energy and gentle winds) indicating potential ecological threats.

Neil Davidson (University of Tasmania) gave a potted history of tree declines throughout Australia where there is a slow, progressive loss of dominant trees and has increased rapidly since the 1950s. There is decline through salinity; Phytophthora Dieback (WA); Mundulla Yellows (SA) River Red Gum decline first identified in 1970 affecting an area of 25,000 km²; High-altitude Dieback (Tas) 20,000 ha with long absence of fire and understorey thickening (Nothafagus); Tuart Decline (WA) identified in 1975 affects 20% of species on the coastal plain associated with Agonis thickening; Coastal Dieback (NSW) identified in 1980 affects 790,000 ha 18% of coastal forest; Bell Miner Associated Dieback first described early 1990s with 100,000 ha affected; Marri Decline caused by canker identified in 1920s; Cider Gum Dieback identified in 1980s <5% of species now remains. Altered forest management \rightarrow altered soil processes and/or availability of soil resources \rightarrow increase pest load exacerbated by climate change are common threads in these declines.

⁽Continued on page 12)

RESEARCH CONFIRMS THE NEED TO CONSERVE UNDISTURBED NATURAL HABITAT

Two articles in CSIRO's *Wildlife Research* Volume 38 (6) are of interest to conservationists. They can be found at <u>www.publish.csiro.au/?nid=144</u>

The first is "Movement patterns by *Egernia napoleonis* following reintroduction into restored jarrah forest" by Kimberley Christie, Michael D. Craig, Vicki L. Stokes and Richard J. Hobbs.

The value of animal reintroduction as a conservation tool is debated. This is largely because the limited quantity of research that has been conducted on animal reintroductions has shown varying degrees of success in establishing new populations. The reasons why some reintroductions are successful, whereas others are not, are often not clear.

This research aimed to determine whether reptile reintroduction into restored mine pits is a potential management technique for managing and conserving reptile populations within a mined landscape.

Twelve Napoleon's skinks were trapped then fitted with 0.9-g transmitters. Half were reintroduced into 5year-old restored mine pits and the other half into unmined forest. Bodyweights, movement patterns and macro-habitat selection were recorded weekly during November and then monthly until March.

Skinks reintroduced into restored sites quickly moved into unmined forest. Both groups of skinks moved large distances, but those reintroduced into restored sites travelled further than did control skinks and took longer to reduce their distances travelled, showing possible stress as a result of release into unsuitable habitat. Eventually, almost all skinks found suitable habitat in un-mined forest and settled into these areas while continuing to gain weight.

Reintroduction was an ineffective technique for facilitating colonisation of restored minesites by Napoleon's skink. Lack of suitable micro-habitats within restoration areas, such as ground logs and coarse, woody debris piles, is likely limiting the use of these areas by Napoleon's skinks and is likely to be the cause of their failure to remain or settle in restored sites after reintroduction.

Determining the habitat requirements of skinks and replicating this in restoration sites would seem to be a more appropriate management option than reintroduction, and this may also be the case for other reptiles and habitat specialists.

The second article is "Does post-mining rehabilitation restore habitat equivalent to that removed by mining? A case study from the monsoonal tropics of northern Australia" by Susan F. Gould. Its conclusions are especially relevant.

Rehabilitation is increasingly being promoted as a strategy for minimising and even reversing biodiversity loss. Many rehabilitation strategies that aim to provide habitat focus entirely on establishing vegetation. Successful vegetation establishment, however, does not necessarily provide habitat that is ecologically equivalent to that removed by vegetation clearing. Quantitative understanding of faunal responses to rehabilitation is required if rehabilitation techniques are to be refined and deliver desired biodiversity outcomes.

This research aimed to assess the extent to which post-mining rehabilitation restores bird habitat equivalent to that removed in the mining process on the Weipa bauxite plateau.

The composition, abundance and richness of bird assemblages were compared between native forest sites and a 23-year chronosequence of post-mining rehabilitation sites. Native forest sites were made up of three Weipa bauxite plateau land units, including the land unit that represents pre-mining native forest, and two land units that are considered to be potential analogues for the post-mining landscape.

Bird abundance and bird species richness increased with rehabilitation age. Bird species richness in the two oldest age classes of mine rehabilitation was similar to values obtained from pre-mining native forest and post-mining landscape analogue sites. The composition of bird assemblages, however, was significantly different. Of all the bird species observed, 25% occurred exclusively in native forest sites, 19% occurred exclusively in mine-rehabilitation sites, and the remaining 56% were recorded in both native forest and mine-rehabilitation sites. Site bird-detection rates were significantly related to site vegetation structure, with inter-specific differences in bird response.

Post-mining rehabilitation at Weipa has partially made up for the loss of habitat caused by clearing for mining. Twenty-three years after rehabilitation commenced, however, a clear residual impact on biodiversity remains, with a third of native forest birds absent from mine rehabilitation, including several native forest specialists.

Rehabilitation can partially make up for biodiversity losses caused by the initial loss of habitat. There is no evidence, however, that rehabilitation can achieve 'no net loss'. Reliance on rehabilitation to achieve conservation outcomes does not address the fact that many fauna species require resources that are found only in mature forest.

Successful biodiversity conservation requires understanding that individual fauna species have specific habitat requirements. The term 'rehabilitation' is not informative about the habitat variables that matter to target fauna species, and rehabilitation that is species rich does not tell the story of individual species' losses and gains. Rehabilitation should not be seen as an alternative to conservation of existing habitat or a strategy for approving habitat clearing.

Mother Nature Stories - Learn & Share

Exciting find in Underwood Avenue Bushland.

This year, all the spider orchids and donkey orchids had finished flowering by the beginning of October. What a surprise discovery then to see this orchid (pictured below) in Underwood Avenue Bushland.

Thelymitras are the sun orchids and this species is *Thelymitra fuscolutea* or leopard orchid (see photo on right). Orchid expert Dr Andrew Brown said that the orchid 'is rare in the Perth Region but it is known from scattered locations as far north as Lancelin'. He added that it was a 'great find.'

In sun orchids, the labellum or lip is almost the same size as the other petals and sepals. (unlike other orchids where the labellum has a distinctive shape and colour and may be ornamented). This strategy is a deceit to attract pollinators who may be deceived because the sun orchid flower looks like flowers which will deliver nectar.

A different sun orchid, *Thelymitra macrophylla*, the scented sun orchid, was found flowering in Monash Avenue Bushland.





Good disguise of the katydid in Underwood Ave Bushland.

The sight of a creature such as this male katydid in Underwood Avenue Bushland is captivating and for a while concern and despair at all the weeds proliferating in the bushland is put aside.

As these balloon-winged katydids rely on their camouflage, they tend to stay put. I read that if prey comes near they have the chance to 'grab the prey with the forelegs and bite it on top of the head immobilising it instantly'. ("A Guide to the Katydids of Australia" by David Rentz).

This katidid's long antennae and big eyes indicate that it is active at night.

(Continued from page 10)

Nicholas Coops (University of British Columbia) gave a most interesting talk on using remote sensing to monitor forest health and condition. Using differing filters, the reflected light from vegetation can be analysed for canopy stresses due to drought and insect damage. Nicholas also spoke of the differences between satellite imagery and that from aircraft as well as determining whether damage is in the upper canopy or mid-storey.

Niels Browers (CoE) spoke of the large-scale health of forests and climate change as a driving process on the health of the diverse forest ecosystems. Rising temperatures in the south-west and downward trend of rainfall with subsequent Tuart decline in Yalgorup National Park and Jarrah decline in Northern Jarrah Forest. The higher temperatures after summer combined with lower rainfall is impacting the health of Wandoo – 20% decline in crown health which is more marked in lower rainfall areas. Niels also spoke of the work undertaken by the Wandoo Recovery Group.

George Matusick (CoE) spoke of the sudden mass canopy collapse in the Northern Jarrah Forest. 2010 was driest year on record which has seen a shift in forest structure – fewer large (> 100 cm) DBH stems, but higher stem density, *Banksia grandis* deaths in advance of the Jarrah deaths and associated woodborer attack on dead trees.

Martin Bader's (CoE) topic was water relations in southwest WA eucalypts. Martin described how tree water use is assessed using state-of-the-art technology to measure internal water pressure and storage and sap flow.

Jérôme Chopard (CoE) spoke of the landscape changes due to tree decline and use of tree water measurements as an indicator of water stress where a tree has used all the water stored in the trunk which cannot be replaced.

James Croton (Water & Environmental Consultants) spoke of the work being undertaken in the Gordon and Thirty-one Mile catchments and the availability of groundwater and implications for future ecosystem health.

Peter Scott (CPSM) spoke of Tuart decline and the role

of the soil-borne *Phytophthora* pathogens. There is direct evidence that *Phytophthora multivora* is involved in the decline of Tuart at Yalgorup National Park, also of Jarrah and WA Peppermint. This pathogen has been isolated, however, mapping has not been undertaken.

Leonie Valentine (CoE) discussed the consequences of changes in forest health and the forest and woodland declines causing a marked change in structure. Dieback has had an impact on reptiles in Banksia woodlands. Fire is used as a management tool, however, fire interval influences availability of food for fauna. Leonie spoke of fruiting productivity with time after fire comparing *Banksia attenuata* with *Banksia menziesii* and estimating the number of Carnaby's Cockatoos that could be supported in different times since last fire. Resources for fauna change with forest and woodland health – some species are advantaged, others are disadvantaged.

Tracey Moore (CoE) spoke of the links between Wandoo crown health and how it affects foraging of woodland birds. Wandoo is endemic to WA and only 40% of original Wandoo remains.

Paul Barber (Arbor Carbon Pty Ltd) discussed the rapid increase in urban development throughout Perth and the tree declines in the urban landscape with the removal of large amounts of endemic vegetation.

Marleen Buizer's (CoE) topic was living with environmental change; how restoration volunteers and (social) scientists can learn together including ecophysical aspects, remote sensing and climatology and intervention restoration ecology. The links between the trio of Volunteers, Researchers and Natural Environment were outlined.

Katinka Ruthrof (CoE) as a follow-up to the previous speaker discussed the perilous future of Tuart forest and linking research with community involvement and management outcomes. About 40% of original Tuart wood-land remains and these woodlands are threatened by lack of regeneration.

Richard Hobbs (UWA) spoke of forest health and the range of process options for intervention. Fire regime, land-use change, hydrology, invaders, climate change and fragmentation – Everything is Connected With Everything Else (the ECWEE principal).

Susan Moore (Murdoch University) discussed the community perceptions of forest health by surveying and interviewing bushwalkers, off-road cyclists and forest managers.

Renato Schibeci (Murdoch University) spoke of how scientists, policy makers and community members can communicate with each other for a more productive outcome.

Geoff Stoneman (DEC) outlined the policy options for forests and climate change.

The day ended with a lively discussion of questions from the floor – this was ably conducted by **Prof. Bernie Dell**. The closing address was by **Frank Batini** (Chair, CoE) who gave a brief summary of the work undertaken by the Centre of Excellence.

With 230 people in attendance, this reflects the interest of all the attendees in the plight of our forests and woodlands and it is hoped to have another symposium in October 2012 to report on further work in this area. There is the possibility of an international symposium to be held in 2013. \diamond What's new? \diamond What's new?

 \Diamond

2012 WETLANDS MANAGEMENT CONFERENCE

"**Wetlands and Tou**rism" with a special focus on Ramsar wetlands is a theme for the 8th annual WA Wetland Management Conference that will be held on World Wetlands Day.

When: Thursday 2 February 2012, 9am-4pm Where: Cockburn Wetlands Education Centre, 184 Hope Road, Bibra Lake

The cost is \$60 (\$20 concessional) and includes the event, food and a copy of the proceedings. For more information, full program and the Registration Form contact Denise Crosbie via email <u>denise@cockburnwetlands.org.au</u> or phone 9417 8460.

2012 Activist Campaign Tools (ACT) courses

The courses are designed to provide **practical skills and campaign secrets** for people trying to improve the world!

Campaign Skills: Freo Sunday 29 Jan, 5 & 12 Feb Translate passion into action! Campaign Planning, marketing and media, politics and lobbying, events, activism tactics and people skills.

Community Skills: Perth Sunday 11, 25 Mar & 15 Apr Build your organisation! Volunteer recruitment and management, fundraising secrets, increase membership, Web 2.0 and Cyber-activism, networking and partnerships.

Speaking Skills: Perth Sundays 6, 20 May, 10 June Compelling Communications: Speaking with Confidence, Speech Structure and Content, Vocal Skills, Body Language, Persuasive Psychology, Dynamic Debating, Impromptu Speaking.

Valued at \$900, the courses are priced for an activist budget with our sliding scale fees starting at just \$150 NGO, \$120 waged individual and \$80 unwaged individual. Each course will accept a maximum of 20 participants – so be quick!

For more details and bookings, please see: <u>www.activistcampaigntools.org</u> or call Katrina on 9443 7454.

Perth Introductory and Advanced Community-Based Social Marketing Training 14-16 March

Dr McKenzie-Mohr, founder of community-based social marketing, will be delivering introductory and advanced community-based social marketing training in Perth. These workshops will be of interest to those working to promote waste reduction, water and energy efficiency, modal transportation, watershed protection, and other sustainable behaviour changes. Community-based social marketing is a unique approach to fostering environment and health related behavioural changes. Workshop Information and Online Registration: https://register.cbsm.com/workshops/workshop-schedule

2011-2012 Biodiversity Fund – Round One Open till 5pm AEST 31 January 2012

Round One of the Biodiversity Fund, part of the Australian Government's Clean Energy Future Plan, is currently calling for applications for funding. The Biodiversity Fund will support projects that reduce Australia's carbon pollution and improve

resilience of our ecosystems to the impacts of climate change. Land managers, groups of land managers working in partnerships or organisations working on behalf of land managers can apply for funding of projects on public or private land. More information along with guidelines and applications forms are available at:

http://www.environment.gov.au/cleanenergyfuture/biodiversity -fund/apply.html

SUMMER 2011-2012

SUPPORT THE URBAN BUSHLAND COUNCIL

Join or renew your membership

Groups:

Membership with voting rights is available to groups committed to the protection of urban bushland for \$35 a year (GST included). A growing membership strengthens the cause and groups benefit from the network.

Individuals:

Supporter membership is only \$25 per year (GST included). Supporters can attend meetings and receive copies of the "Urban Bush Telegraph"

Groups and supporters are reminded that annual membership fees include one printed copy of the Urban Bush Telegraph (currently published quarterly). Additional printed copies can be ordered at a cost

of \$5.00 per copy per annum.

Send your name, address and cheque or postal order to:

Treasurer, Urban Bushland Council WA Inc, PO Box 326, West Perth WA 6872

Urban Bushland Council Activities

ANNUAL GENERAL MEETING

Tuesday 6th March

A TAIL OF TWO COCKATOOS – ONE RED, ONE WHITE

Presentation by Ron Johnstone, Curator Ornitology, Western Australian Museum

The Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso and Baudin's Cockatoo C. baudinii are large, iconic, forest cockatoos endemic to the SW corner of Western Australia. The presentation will discuss the current distribution, relative abundance, breeding, feeding and movements for both species in the south-west. There has been a dramatic change in the distribution, status, habitat preferences and foraging ecology for these birds in the last 20 years. Their future conservation is of great concern as 2010–11 has seen a marked decrease in numbers in many areas. There is a clear need to study the conservation issues affecting both species, protection of critical habitat and improving our understanding of their breeding biology.

Meet at 6.30pm for 7.00pm start at the Citywest Lotteries House, 2 Delhi Street, West Perth

For more information contact the UBC office on 9420 7207

All welcome

UBC PUBLICATIONS

- Perth's Banksia Woodlands Precious and Under Threat Proceedings of a symposium (2011) Available from the UBC for \$25 plus \$3 postage.
- Endangered Black Cockatoos in Western Australia proceedings of a symposium about their biology, status, threats and efforts to restore their habitat and populations. Available from the UBC for \$25 plus \$3 postage.
- Wetlands to Wastelands? proceedings of a seminar about the future of bushland at Perth Airport (2004) Available at UBC's website http://www.bushlandperth.org.au/html/infosheets.htm
- Burning Issues—proceedings of a workshop about fire management in urban bushland. (2002) Available from the UBC for \$11, postage included.
- Building Partnerships between Community Groups and Local Government for Our Bushland –proceedings of a seminar (2000) Available from the UBC for \$5.50, postage included
- Managing our Bushland proceedings of a conference about the protection and management of urban bushland (1998) Out of print; available in libraries.

Burning our Bushland - proceedings of a conference about fire and urban bushland (1995) Out of print; available in libraries.

NEWSLETTER ITEMS

Compiled by: Renata Zelinova

PLEASE SEND CONTRIBUTIONS TO:email ubc@iinet.net.au

Copy deadline - 15 March 2011

PERTH'S BUSHLAND BIRTHDAY & PERPETUAL

CALENDAR

\$15 plus \$2 postage

Available by mail order from the UBC office.

Office:

URBAN BUSHLAND COUNCIL WA Inc

Lotteries House 2 Delhi Street West Perth WA 6872

Ph 9420 7207 E-mail: vbc@iinet.net.av

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