

DISCOVERY OF A RELIC GONDWANAN MUSHROOM IN URBAN BUSHLAND

Participants at our PUBF Forrestdale Lake workshop in 2004 discovered a possible relic from Gondwana: an unusual mushroom growing under a thick layer of shrubs overarched by taller gum trees and paperbarks.

Gondwanan Fungi

The geographical distributions and abundances of most Australian fungi are poorly known. The *Fungimap* program is helping to address the question as to where our fungi occur. It is however known already that the geographical distributions of mycorrhizal fungi are closely tied to those of their host partner plants. At least some mycorrhizal fungi had established their plant partners before the breakup of the southern super continent Gondwana. These ancient fungi are presently found scattered in portions of former Gondwana including Australia, New Zealand, New Caledonia, New Guinea, and South America. Some of the fungi have a present-day distribution similar to that of the southern beech – *Nothofagus*, which was probably a major mycorrhizal plant partner for fungi in Gondwanan times, as it continues to be today.

The Discovery

Forrestdale Lake is a groundwater-fed lake on the southern outskirts of the Perth Metropolitan Region. Areas of paperbarks and open woodland surround the lake. The unusual fungus discovered at Forrestdale by PUBF workshop participants in July 2004 was growing under a thick layer of *Astartea* shrubs overarched by eucalypts and paperbarks (*Melaleuca* sp).



The fungus is a member of the large, well-known genus *Cortinarius*. This brown-spored genus is usually characterized by its cobweb-like partial veil (cortina) and by not having a ring or cup on its stem. However the Forrestdale *Cortinarius* fungus has a distinctive white cup (volva) at the base of its stem and large white patches on its bright brown cap. The fungus is *Cortinarius phalarus* – “the Volvate Cortinar”.

This fungus was first named and published in 1989 by N.L. Bougher and R.N. Hilton from near the town of Denmark on the south coast of Western Australia, and has been rarely recorded since. The Volvate Cortinar may occur across southern Australia, as indicated by a collection in 1991 and subsequent reports from near Hobart in Tasmania, but it is possibly quite rare. *Cortinarius phalarus* is considered a probable gondwanan fungus because it and several similar species in south-eastern Australia are members of an unusual small group of volvate cortinarii also found in South America.

Why does this Fungus occur in a Perth Urban Bushland?

The question may be asked as to why a putative relic gondwanan fungus such as the Volvate Cortinar occurs in an urban bushland in Perth when *Nothofagus* has been extinct for many thousands of years in the region. However, it is likely that at least some

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Editorial

The spectrum of articles in this issue clearly indicates the spectrum of issues Friends Groups are dealing with in their concerns about the future of urban bushland.

There are the positive stories where steps are being taken towards bushland conservation, such as the decision to change the zoning from *Urban and mixed use* to *Rural* in Guilderton. The Urban Bushland Council (UBC) strongly supported this decision as it is against the push for unsustainable urban sprawl. The original proposal for expansion of Guilderton townsite through the development of over 500 hectares of land in the sensitive coastal and Moore River estuary environments was a typical example of such unsustainable development. Considering the capability of the Moore River Estuary to provide opportunities for recreation within easy reach of highly populated Perth, the proposed provision for a portion of the above rezoned area as “*recreation and tourist node investigation area*” is a more acceptable alternative.

At recent hearings on MRS Amendment 1082/33: Bush Forever & Related Lands, the UBC took the opportunity to support the rezoning of 94 sites as *Parks & Recreation* and the introduction of *Bush Forever Protection Areas (BFPA)* reflected in the Amendments to the Scheme Text. This will give statutory effect to the protection of regionally significant bushland identified in *Bush Forever*. However, we stressed the need that a section be inserted to require that all BFPA be managed by the landholder to preserve and maintain their conservation values. The UBC also called for an explicit clause for a ‘*prohibition of clearing*’ in BFPA. After all future generations will not have Bush Forever sites if they are not protected from clearing.

Then there are the great stories of discoveries of rare biota in urban bushland. These stories just highlight the importance of the remaining vegetation and demonstrate the worthy efforts by groups that fight for every piece of bushland.

However, there are still sad reports of bushland being cleared or mismanaged. There is a constant need for educating not only general public but most importantly land managers about the values of the land they manage and proper bush regeneration practices they should use.

Off-Road Vehicles

Despite decades of directing complaints to land managers, bureaucrats, and politicians about unauthorised off-road vehicles usage in high conservation value bushland and wetland areas around Perth, those of us who care about our natural heritage continue to be frustrated by the apparent impunity with which off-road vehicle vandals can operate.

Perth Airport has been a disgrace in this regard for many years but the problem is complicated by the site being under Commonwealth jurisdiction. Elsewhere in Perth, the *Control of Vehicles (Off-Road Areas) Act 1978* is the instrument by which the police, local government rangers, relevant CALM officers, and other “authorised persons” can enforce restrictions on off-road vehicle usage.

The *Act* contains some strong penalties, including large fines and the impounding of vehicles, but whether it derives from the nature of the legislation or the unwillingness of “authorised persons” and their employers to put it into full effect, there is too much environmental harm being done by off-road vehicles around Perth and not enough is being done to stop it.

The *Control of Vehicles (Off-Road Areas) Act 1978* is currently being reviewed by the Department of Local Government and Regional Services. The Department will produce a position paper in light of submissions received during a comment period (now closed) and there will probably be further opportunities for public input in response to the position paper.

But whatever eventuates, if land managers don’t feel inclined to enforce the relevant laws the problems can only persist. Be under no illusions, driving through scrub, knocking over trees, and gouging 4WD’s through muddy wetlands is a real passion for a certain cohort of enthusiasts and unless rangers and other “authorised persons” demonstrate the same level of zeal for stopping these practices the destruction will go on.

BUSHLAND AREAS UNDER THREAT

- WEBSTER ROAD BUSHLAND, FORRESTDAL
- BUSHLAND AT KEWDALE FREIGHT TERMINAL
- PERTH AIRPORT (BFS 386)
- CONSERVATION CATEGORY WETLAND AT BERINGARRA AVE, MALAGA
- PART OF BFS 293 (NOWERGUP)
- BURNS BEACH FORESHORE
- TRIGG BEACH BUSHLAND (BFS 308)
- ASHTON RD BUSHLAND, BULLSBROOK (BFS 88)
- BFS 344 (BANJUP)
- BANJUP BUSHLAND (BFS 263)
- BUSHLAND ADJACENT TO THOMSONS LAKE (BFS 391 & BUSHLAND ALONG HENDERSON RD, MUNSTER)
- COASTAL STRIP FROM WILBINGA TO MINDARIE (BFS 397)
- ALL BUSH FOREVER SITES IN THE **NEGOTIATED PLANNING SOLUTION IMPLEMENTATION** CATEGORY
- KIARA TAFE SITE
- BOLD PARK (BFS 312)
- KEN HURST PARK (BFS 245)
- NORTH LAKE (BFS 244)
- UNDERWOOD AVE (BFS 119)

DIALOGUE WITH GREATER BUNBURY Saturday 30 April

UBC representatives attended the *Dialogue with Greater Bunbury*. The day was well organised by DPI and ran smoothly, with the Minister for Planning and Infrastructure Hon Alannah MacTiernan in attendance all day. Both the Minister and Paul Frewer (DPI) are to be commended for their honest, clear and direct responses to the array of issues raised.

There were some impressive talks presented:

- Findings of the Community Survey on Regional Open Space (ROS). Copies of the summary report are available from Renata at the UBC Office (ph 9420 7207 or ubc@iinet.net.au) for anyone interested. In answer to the survey question: 'What do you feel should be the main guiding principles behind the Greater Bunbury Region Scheme in relation to Regional Open Space?' 93% of respondents said 'Protection of areas of conservation and recreation value is of relatively major importance in planning the future development of the region (as opposed to minor importance). This is a very high level of agreement across all sectors.
- Ocean to Preston River Regional Park (by DPI) -as recommended in the Greater Bunbury Structure Plan (WAPC November 1995). The proposal now includes Lot 632 Parade Rd Usher, Shearwater Tuart Forest, College Grove, The Maidens, and provides a greenbelt of 837 ha from the coast to the hills. It has more than 12 Floristic Community Types, Threatened Ecological Communities and bird populations of regional conservation significance. When finally secured it will be managed by CALM.
- Protecting Our Best Conservation Estate for the Future (by Bernhard Bischoff). A passionate plea for the greater Bunbury Region Scheme to be implemented without further delay.

- South West Catchments Council: Key values and issues. The Coastal Plain in the Bunbury area is significantly cleared with 77% vegetation already gone. Only 3 of the 15 vegetation types present have sufficient area left to meet national biodiversity targets of 30% retention.

Acid sulphate soils (ASS) were also mentioned. "ROS can potentially be a management tool to avoid development of high risk ASS areas if the proposed management plans for ROS precludes development that can disturb ASS".

Summaries of these talks are available from Renata in the UBC Office.

Some repeated messages emerged during the *Dialogue* day.

- the community wants to conserve and protect natural areas for conservation and recreation
- there is a need for proper funding for acquisition and management of ROS
- Existing management is inadequate - both state and local governments have responsibility for management.
- People want more access to natural areas
- Private bushland can be kept in private ownership, and there was strong support for incentive programs for private bushland (eg covenants with National Trust, Land For Wildlife)
- There is strong support for a Bunbury Region Scheme and most people support inclusion of some private land as ROS as well as public lands.
- Government policies and decisions are inconsistent. There is too much clearing (Ludlow Tuart Forest, Dallyup) and less than 30% remains for most ecological communities

The Minister in closing made a commitment that 'the common themes set by the community at the *Dialogue* will be used by decision makers in planning for Regional Open Space in the Greater Bunbury Region over the next 50 years.

STATUTORY RECOGNITION AT LAST - BUSH FOREVER PROTECTION AREAS

The *Bush Forever* major Amendment to the Metropolitan Region Scheme (MRS) will soon be going to State Parliament for acceptance. This is the biggest amendment ever proposed. It will at last 'give statutory effect' to *Bush Forever* as a conservation reserve system for the Swan Coastal Plain part of the metropolitan region. Gaining statutory recognition and protection for *Bush Forever* is one of the UBC's major objectives.

But we need to make sure that the *Bush Forever* Amendment includes real *protection in perpetuity* for all Bush Forever sites. This means keeping the boundaries secure as well as provision for active management to retain conservation values into the future. Introduction of a legal designation as *Bush Forever Protection Areas* alone will not be enough to maintain sites into the future. Neglected sites are already degrading. The UBC has strongly recommended the addition of two new clauses into the text Amendment for the proposed *Bush Forever Protection Areas* in the MRS.

1. An explicit *prohibition on clearing in all Bush Forever sites*
2. A requirement for landholders of *Bush Forever* sites to manage the land for maintenance of conservation values.

Whilst supporting the Amendment, the UBC insists these additional provisions are essential if we are to stop the tide of the current neglect of sites and whittling away of sites for development.

UBC members are well aware that State Government agencies as well as Local Government Authorities are guilty of putting forward inappropriate development proposals in *Bush Forever* sites. Just last week we heard the Minister for Planning and Infrastructure The Hon Alannah MacTiernan successfully pushing

the Town of Cambridge to locate a new athletics stadium complex in bushland of the A-K Reserve, rather than on the existing stadium site at Perry Lakes. Bold Park, Perry Lakes and the A-K Reserve are all included in Bush Forever site 312. The problem is that the vegetation on the A-K Reserve and adjacent University land on the McGillvray Oval side form the only significant ecological linkage from Underwood Avenue bushland to Bold Park via the CSIRO land. This linkage is classed as regionally significant in *Bush Forever*. And it is part of the significant link from Kings Park to Bold Park via Shenton Bushland and Underwood Avenue. It must be protected.

In the City of Swan *Bush Forever* site 88 - Ashton Road Bushland Bullsbrook- is under threat from a proposal by the Bullsbrook High School to build a swimming pool in the bushland. The school seems to be unaware of the significance of the site and the fact that it is part of our conservation estate.

It is vitally important that the Bush Forever Amendment gains the support of all metropolitan Members of State Parliament. UBC members are encouraged to contact their local MPs, including both Lower (MLA) and Upper House Members (MLC) to secure their votes. The best technique is to invite them to visit your local Bush Forever sites with you and to let them experience the human values of being in these wonderful natural places in our city. Remember to make sure they understand and support our 2 extra clauses for a prohibition on clearing and for a management obligation by landowners. After all we are talking about a massive public asset of over 50,000ha bushland valued at some billions of dollars. It must be provided with a management statute and then the resources to maintain it. Perth is the biodiversity capital of Australia and one of few biodiverse cities of the world.



Perth Urban Bushland Fungi

Our Perth Urban Bushland Fungi Project website is now up on the World Wide Web so please visit it at www.fungiperth.org.au. You will find many interesting features there, including our innovative new field book, which you can download and use to record your own fungi field experience. The new website offers different news items, information about events to be held in 2005 and also information on what we did in 2004. Another great feature is 'Fungus of the Month', where you can learn about Perth's fungi one at a time. There is a section on learning about fungi and finally an "Other resources" section where you can follow up your own particular interests.

Calendar of events for 2005 fungi season

Whole day free teaching **workshops** aim to teach how to gather information about fungi, where to look for them, how to identify them and what to consider when taking photos of fungi for identification. Each workshop caters for a maximum of 40 people. There will be four workshops:

Sunday, 19 June
Sunday, 3 July
Sunday, 10 July
Sunday, 24 July

Mindarie Bushland
North Lake Bushland
Hartfield Park Bushland, Forrestfield
Warwick Open Space Bushland

During a 2 hour **fungi walk** participants will learn about the diversity of fungi and their importance to the environment:

Saturday, 11 June
Saturday, 25 June
Saturday, 9 July

Allen Park, Swanbourne
Sir Frederick Samson Pk, Fremantle
Periwinkle Bushland, Mullaloo

Sunday 12 June
Sunday 26 June
Sunday, 17 July

Paganoni Bushland, Karnup
Darling Range Br.
Kensington Bushland

To register and for further details contact Roz Hart, the PUBF Community Education Officer on 9334 0500 weekdays or by email at roz@calm.wa.gov.au

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former fungal partners of gondwanan plants such as *Nothofagus* survive today in areas where those plants are now locally extinct. The fungi may have survived local extinction of *Nothofagus* and other plants of Gondwana in regions such as south-west Australia by forming partnerships with other plants, such as those of the family Myrtaceae. Today many of the so-called gondwanan fungi such as the Volvate *Cortinarii* are distributed both within and outside the current geographic range of *Nothofagus*. In Western Australia these fungi are most likely now confined to the higher rainfall zones in the south west where a high number of relic plants also occur. Most, if not all species of *Cortinarius* are considered to be mycorrhizal. The partner plants of the Volvate *Cortinarius* at Forrestdale are likely to include the myrtaceous plants occurring there such as *Melaleuca preissiana*, *Eucalyptus rudis*, and *Astartea* sp.

Conservation of Forrestdale Lake area

Forrestdale Lake, listed as a wetland of international importance in the Ramsar Convention on Wetlands, is being rapidly encroached by agricultural, urban or semi-urban land. The wetlands area at Forrestdale Lake is managed by the Department of Conservation and Land Management. The finding of a putatively ancient gondwanan fungus such as the Volvate *Cortinarius*, together with numerous other fungi found in the area around the lake by participants of the 2004 PUBF workshop, helps to support the conservation status of Forrestdale Lake.

How to recognize the Volvate *Cortinarius* and contribute to knowledge

Further records of the Volvate *Cortinarius* fungus would add to our knowledge of its distribution and ecology. Please contact PUBF if you come across this fungus. Any data such as about the species of plants nearby, photographs and specimens that may aid verification of identity of the fungus would be helpful. If you are able, clearly mark the location and contact PUBF at the earliest possible time. However, please remember that to collect, you **MUST** be a registered collector with a CALM licence **before** you collect any specimens.



KEY FEATURES OF THE VOLVATE CORTINARI FUNGUS:

Habit: in litter on ground near Myrtaceous plants, e.g. *Eucalyptus* sp, *Agonis* sp, *Leptospermum* sp, *Melaleuca* sp.

Cup: white cup (volva) at the base of the stem.

Cap: white patches adhering on a bright brown cap 25-70 mm broad.

Stem: cream, longitudinally shiny, silky, 40-70 mm tall by 6-15 mm wide.

Gills: fawn brown, closely-spaced.

Spore print: brown.

For more details to help recognize the Volvate *Cortinarius* fungus see:

Bougher, N.L., & Hilton, R.N. (1989). *Three species of Cortinarius from Western Australia*. Mycological Research 93: 424-428.

Cockies in Crisis

As extinctions occur at a rate unsurpassed in recent history, the eyes of the world's conservationists are now firmly focused on our south-west region, one of the world's "biodiversity hot-spots", and its diminishing biodiversity.

The **Forest Red-tailed Black Cockatoo** *Calyptorhynchus banksii naso* (Threatened), **Baudin's Cockatoo** *Calyptorhynchus baudinii* (Threatened) and **Carnaby's Cockatoo** *Calyptorhynchus latirostris* (Endangered) are all endemic to the south-west of this State and all have declined greatly since colonial times. These birds live for over 50 years, begin breeding at 4 years of age, mate for life and use the same nest hollow each breeding season. Cockatoos that you see are from an ageing population with little or no recruitment. Of the forty two (42) Forest Red-tailed Black Cockatoo nest sites being monitored by the WA Museum, not one was successful in raising a chick in 2004.



Carnaby's Cockatoo feeding on *Banksia* seeds.

Photo by Kevin McLean

Is it acceptable that these spectacular cockatoos, once widespread and common in the South-west, be allowed to dwindle towards extinction?

Cockatoo Care program

'Cockatoo Care' is a conservation partnership formed between the WA Museum and the Water Corporation some three years ago. The research and public awareness program continues to gain enormous public response to help the survival of these iconic birds in Western Australia.

Project objectives

The main objectives of this joint project are:

- Research into the distribution and ecology of each of the three species of cockatoos and the threats to their survival,
- Habitat enhancement through habitat planting and installation of artificial nest boxes,
- Assessing the impact of feral European honey bees on hollow-nest sites in South-west forests and the development of effective eradication and control methods, and
- Community education and involvement.

Achievements to date

Information is being gathered on species status and distribution, habitat preferences, breeding season and preferred food types as well as details of nest trees, incubation period and other valuable breeding behaviour. Detailed studies have revealed the devastating impact feral honey bees are having on the cockatoos and other hollow-nesting fauna. In a number of cockatoo study sites, up to 50% of nest hollows have been lost to feral honey bees in the past year. Another key aspect that has become evident from the studies is the paucity of suitable nest hollows in forests and woodlands and the importance of veteran (ageing) and stag (dead) trees – it takes an average of 233 years for a tree to develop suitable hollows and some nest trees are up to 500 years of age.

How can you help?

- Record your Black Cockatoo sightings by completing an Observation card or Frequent Sighting form; both are obtainable either from the Cockatoo Care 'downloads' web page or the Water Corporation on 9420 2182. Observation cards are also available at selected dam sites.
- Protect your local bushland and large trees, particularly veteran and stag trees.
- Visit the www.cockatooocare.com website – more ideas, details of events and lots of other useful information is available.

Skills for Nature Conservation

Free training courses for anyone interested in making a difference to the environment

MANAGING YOUR BUSHLAND FOR UNPLANNED FIRE

11 June, 9 am—1 pm

At Warwick Leisure Centre, Warwick

CREATING WETLAND HABITATS

18 June, 10 am—4 pm

At Piney Lakes Environmental Education Centre, Winthrop

FUNGI FORAY

3 July, 10 am—4 pm

At Cockburn Wetlands Education Centre, Bibra Lake

PROMOTING YOUR GROUP—WAYS TO BE SEEN AND HEARD

30 July, 10 am—1 pm

At Swan Catchment Centre, Middle Swan

FANTASTIC FLORA—BASIC PLANT IDENTIFICATION

13 August, 9 am—1 pm

At WA Horticulture and Environmental Science Skills Centre, Challenger TAFE, Murdoch

KNOWING YOUR WEEDS—STOP THE SPREAD

27 August, 9.30 am—3.30 pm

At Woodvale Research Centre, CALM

WETLAND MANAGEMENT—TECHNIQUES FOR SOLVING PROBLEMS

3 September, 10 am—4 pm

At Wilson Hall, Wilson

TOOLS FOR TACKLING WEEDS—SUCCESS WITH CONTROL

17 September, 9.30 am—4.30 pm

At Woodvale Research Centre, CALM

RVSP are ESSENTIAL (08) 9374 3333

Past course notes can be found at www.wrc.wa.gov.au/swanavon/pages/info_sheets.html

VISIT TO PERTH AIRPORT BUSHLAND

Next time you go to the Perth International Airport, and you turn into Horrie Miller Drive, you will see a huge Woolworth's Warehouse and Distribution Centre on your right. Over 30 hectares of beautiful bushland was bulldozed at this corner last year. And you will also see further developments destroying the fragile ecosystems.

On Sunday 3rd May a small group of Urban Bushland Council members and friends met Peter Cock, the Environmental Strategy Manager for Westralia Airports Corporation (WAC). WAC was granted the lease of Airport land by the Commonwealth Government, after privatisation of the airport.

Most of us had seen the Woolworth's site when it was first bulldozed, but now, on its moon scaped desert was the Woolworth's building with its landscaping of European trees and agapanthus along the curb, and the compensating basin.

Further north adjacent to the Woolworth's site a large area has recently been bulldozed and built up by at least a metre with sand. This new desert-scape is bounded by a drain several metres deep. The bushland which was destroyed was some of the best bushland you could have seen. It was part of *Bush Forever* site number 386, with an area of 629.5 hectares, less what has been destroyed already.

Major Development Plans, such as the Woolworth's plan, and the proposed Coles Development Plan require approval by the Commonwealth Minister for Transport and Regional Services, Mr John Anderson. Advice is sought by Mr Anderson's Department from the Commonwealth Department of the Environment and Heritage. In the case of the Woolworth's site, The Department of the Environment and Heritage gave approval to the development, with conditions. They ruled inexplicably that there had been 'no significant environmental impact.' How can a Department of the Environment and Heritage approve the destruction of over 30 hectares of pristine bushland? Having failed to protect our environment and heritage, we find we have to appeal, not in an official process, but through letters, to that very Department.

Our group walked on along a track through bushland which in the Airport's Master Development Plan is within Conservation Precinct 5. The track had topsoil from the Woolworth's site placed on it. The hope by WAC was that the topsoil would contain seeds which would grow to revegetate the track. There was regrowth, but the plants were not consistent with the bushland plants on either side of the track and lots of weeds were coming up in the disturbed topsoil. Fragile ecosystems cannot be moved around in bulldozer buckets. In addition, while putting the topsoil on the track, the track had become wider, through incursions by machinery.

Trail bike riders were every where, including quad bike riders on their four wheeled machines. The riders let their machines do the talking by either running away down different tracks or by wheeling past us and showering us with sand (see below).



We walked north and came upon a newly built fence which had been built 20 metres away from and parallel to an older fence. The photos below show a scene of shocking devastation that unfolded before our eyes. Between the two fences, and filling the space were smashed trees and branches. Most of the trees were *Banksia menziesii*. The reason given was that the trail bike riders would not be able to drive at the fence to knock it over.



Photos by Margaret Owen

We came to an area of further devastation marked 'Stop, Bandicoot Rehabilitation Area'. This area had broken melaleuca trees and some large marris strewn across the ground. It looked like another battle ground. The branches and trees were there to stop trail bike riders. Perhaps an external fence around the airport, or education would wreak less damage than pulling melaleucas from bushlands and wetlands.

We were interested to see the area where Main Roads and the Minister for Planning and Infrastructure, Ms MacTiernan, want to build an on-ramp to connect Abernethy Road to Tonkin Highway. The on-ramp would go right through a conservation category wetland of exceptional quality. The *Banksia littoralis* (Swamp Banksias) were flowering and we saw some of the many birds recorded (87 species), including a Little Eagle. The proposal for the on-ramp has been assessed by the EPA as being 'environmentally unacceptable' and Main Roads were told that the proposal 'should not proceed'. However Main Roads are challenging the EPA's assessment.

At the conclusion of the 'Wetlands to Wastelands?' seminar, held last October, a proposal was put that all conservation areas at the Perth Airport be excised from the airport lease and managed by the State Government. This proposal was put in a letter to Mr. Mark Flanigan of the Department of the Environment and Heritage. In his reply Mr Flanigan wrote: 'It is not possible to excise the bushland and wetland areas on Perth Airport from WAC's control because of lease arrangements.'

By their actions, Perth Airport's outstanding natural heritage bushland and wetlands are considered valueless by WAC and the Federal Government. The granting of the lease was a cynical exercise in land profiteering to a corporation whose interest is making money. It is very hard not to be cynical about the entire process. The Commonwealth insulates itself against criticism by saying it is bound by the terms of the lease. It could well have ceded a large part of the airport land for conservation in perpetuity rather than engaging in complex bureaucratic games that would leave even Sir Humphrey Appleby perplexed and baffled.

For its part WAC seems happy to plead commercial imperatives. Clearly a boundary fence to protect the valuable areas against human and animal predators should be built now, rather than waiting until other arrangements are in place.

If the nation thought an icon like Kings Park was about to be destroyed then there would be outrage. The airport bushland is just as irreplaceable.

Group News Group News Group News

Armadale Wildflower Society members along with invited guests attended a function on 28th April for the release of a book and CD documenting the 40-year history of the society. Known originally as the Armadale-Kelmscott Wildflower Society, the group was formed at a public meeting called by the then Armadale-Kelmscott Road Board on 28th March 1961. Member and past-president Rob Harrington undertook the research and compilation of the book which was released by the Armadale Mayor Linton Reynolds. Speeches made by Patron Dr Tony Start and Mayor Reynolds outlined much of the work done by the society over the years and involvement in local environmental issues.

Kim Sarti

Friends of Beckley Bushland

THEY PAVED PARADISE TO PUT UP A PARKING LOT.

It was early May 2004, when Ms MacTiernan put out a press release 'Room for parking and orchids at South Street'. Ms MacTiernan said the New Metro Rail project was preparing alternative plans for expanding car parking in a way sympathetic to maintaining a habitat for the rare orchid.

Murdoch Station, on the line to Mandurah, was planned for the middle of the Freeway and Beckley bushland was to be the site of the 600 bay parking area, slip road and bus station. To preserve the 22 individual *Caladenia huegelii* growing there, a token 0.8 hectare of Beckley bushland was allowed to remain for the orchids, and the remaining 80% of bushland including the connecting links along the Freeway, was to be destroyed.



Caladenia huegelii
Photo by M. Owen

After all the appeal processes had been exhausted, with the government steadfastly denying that Beckley bushland was significant, a decision was made by a small group of friends to occupy the bushland. On 24th February, 2005, some of the best people in the world set up camp in the bushland and erected two platforms in trees. One was in what came to be known as 'the iconic marri,' estimated to be around 300 years old. The trunk of this old tree touched but was outside the conservation area. New Metro Rail said that because it would have to be pruned and have its roots cut to accommodate the bus station, it would be dangerous and could not be saved. The other platform was in a tall marri to the west, which was 2.2 metres outside the conservation area and therefore also doomed. It would after all be taking up three car parking spaces.

To raise awareness the bushland was decorated with banners including a wonderful banner 10 metres long saying '26 species of orchid grow here' and a vertically hanging banner with a painting of the Grand Spider Orchid. Photographs were scanned, enlarged, placed on stakes and displayed along South Street and we distributed fliers to motorists until warned off by police.

It was difficult maintaining the roster of having at least two people in the bushland day and night. After a week we had accumulated the accoutrements of what one needs for living in the bush; a stove, water, table, tents, food and a phone. ABC TV had given us a video camera to record aspects of life in Beckley bushland, and in particular, Rob Greenwood's part in it. The program, in the series 'How the Quest was Won' will go to air one Monday night at 6.30pm on Channel 2.

Of the twenty days spent in the bushland before it was bulldozed, Rob was there for around 17 days and nights. Rob did a lot of PR work, inviting passersby in for cups of tea, and trying to explain why we were in this position. Interest was building and people started to visit the bushland and give support.

Flocks of white tailed black cockatoos visited some mornings, 'thinning the marri blossoms.' Ctenotis, those gorgeous lined and spotted skinks were seen in biggish numbers, Quendas were seen and heard, and a Western Bearded Dragon was admired on a *Conostylis*. Relying on his camouflage, he did not move for hours, but he was not too well camouflaged on the green leaves.

Night time was stressful. Traffic went along the streets all night, but the angry abuse from men in passing cars, vans and buses every few minutes shocked me. The consistent theme was that we were hippies engaged in sexual intercourse. Mung beans, smoking pot and mangey female parts also were accompanying calls. As I wrote later in a letter to Dr Gallop, there was not a pair of flares among us and often, the only thing to eat was weeties. Dr Gallop must still be considering his reply.

Apart from the calls we were invaded on several occasions during the nights. One drunken group at 4 am told us to wake up as they were from Channel 10 doing an interview. (Channel 10, I did not believe for a moment that the guys were genuinely from Channel 10). As they used a loud hailer and a spotlight, we had no trouble waking. Another lot of interlopers smashed down a tent when Rob offered them a cup of tea. Rob, why be so provocative?

Apart from our presence in the bushland we were involved in letter writing, meetings, contacting journalists and trying to meet people in government who could help. Supporters were writing urgent letters suggesting ways of facilitating transport without destroying the bushland. The date for the start of clearing kept changing. We did hear that the government was going to bypass Beckley bushland for the time being and move on down the track to clear further down. Prior to the election we had heard that the Labor Government was going to re-visit the design of the carpark to make a multi story carpark on the other corner, and would put out an announcement. However this did not eventuate.

On Wednesday 16th March police arrived in the morning and asked those in the bushland to leave. Could there have been an over reaction by authorities? Twenty two police came, one lane of South Street was blocked off, 50 police were on standby, security guards were stationed around the perimeter and a police helicopter was in the sky. The bushland was ripped, torn, smashed and pulled with mighty machines. Soil and dust streamed into the air in a plume across the Freeway.



Ignorance had won the day.

Despite New Metro Rail officers saying through all the processes of appealing, that there was no way that the iconic marri tree could be saved, both it and the marri on the west are still standing and may yet be allowed to survive.

But not this one...

Margaret Owen.

Photo by M Owen

Group News Group News Group News

The **Bungendore Park Management Committee** has been fortunate to receive Community Conservation and Swan Alcoa Landcare Program grants for dieback control treatment in the park. Additional funds from the City of Armadale has meant a considerable programme of injection and spraying will be undertaken this year by Dieback Treatment Services.

At the conclusion of the April meeting formalities, we had "drinks & nibbles" to recognise the contribution over the past 9 years by our Chairman Cr Frank Green and Secretary Mr David Allen. Frank did not seek re-election at the recent local government elections and David and Kath are moving closer to their families in Bunbury. We wish Frank, David and their spouses well in their new endeavours.

Kim Sartti

The **Joondalup Community Coast Care Forum (JCCCF)** is a new member of the UBC. This group was formed in February 2000 to deal with issues along the 16 km long coastal reserve of the City of Joondalup (CoJ), and area of approximately 240 hectares (mostly Bush Forever Site 325). In particular, JCCCF objectives are:

- (a) To act as a reference group for monitoring issues and initiating action relating to the Joondalup coastal strip, particularly in relation to conservation, recreation, development, education and culture.
- (b) To integrate and establish communications between related organisations.
- (c) Provide a contact point for information and education.
- (d) Instigate initiatives relating to the best interest of the Joondalup Coastal strip.

The current committee members come from a variety of backgrounds, with six of the members having a strong conservation background. To ensure effective cooperation with the local government, the group is represented at the CoJ Conservation Advisory Committee and Keith Armstrong, Conservation Officer for the CoJ, sits on the JCCCF committee as the Council representative.

Over the last 5 years JCCCF has been conducting very successful dune restoration projects, and received funding support of some \$20,000 from the City and private money through Landcare/ Coastcare. JCCCF is looking to apply best practice to this work, and is always looking for better ways of achieving real results. To that extent, we have compared our methods to those used by other Coastcare Groups and bush regenerators generally. JCCCF has just received another grant of \$8,000 (from Envirofund) to perform restoration work in the Iluka/ Ocean Reef area.



Sorrento Beach Dunes Rehabilitation Project, looking north to Hillarys Marina - November 2004

Photo by M Norman

JCCCF lobbied to get a comprehensive Coastal Foreshore Natural Areas Management Plan prepared, and then lobbied to get it implemented by the CoJ. For the last two years, the CoJ has allocated \$150,000 per year to commence implementation of this plan. In December 2004, the CoJ let a contract to Bennet Brook Environmental Services to commence bush regeneration tasks within the CoJ, including the coastal strip.



Mike Norman, JCCCF Chairman, with Dr Mel Washer MP and Senator Ian Campbell (Federal Minister for the Environment), talking about the increase in money for coastal projects - September 2004

Photo courtesy of Mel Washer office

Apart from the environmental projects, JCCCF has been involved in a great number of other issues, such as preparing detailed submissions on the Draft Cultural Plan and the Draft Tourism Plan. JCCCF has even lobbied for a toilet block in a grassed park near the dual use path at Ocean Reef, where people are using the coastal dunes because of the lack of such a facility over a 3 km stretch!

JCCCF have been involved in a number of actions to minimise the impact of housing or business development on the coastal strip. For example, JCCCF has got CoJ Planning Policy changed so that land developers can no longer discharge storm water, which can bring in nutrients, weeds and disease, into the coastal reserve. The group is also involved in environmental education.



Mike Norman with children from Our Lady of Mercy Primary School - examining types of rubbish a sorting for recycling - April 2003

Photo courtesy of Our Lady of Mercy Primary School

Recently our activities have involved critical examination of the Burns Beach housing estate Structure Plan, where JCCCF has found the width of the coastal reserve is far too narrow. It does not meet DPI guidelines, even though DPI have approved it, but based on information from the Developer that JCCCF claim is false. We also looked at the Burns Beach Foreshore Management Plan, which JCCCF claim is in need of a major revision.

Group News Group News Group News

Ideally, JCCCF would like to have active members from every suburb along the full length of the coastal reserve, to have sufficient presence and resources to deal with the multitude of issues that arise along the coast, and to help get all the currently degraded natural areas bought back to at least "Very Good" condition, as defined in the Coastal Management Plan. If there are any readers who would like to be involved, even in a minor way, call Mike Norman on 9448 1978.

Mike Norman

Men Of The Trees

Are planning to hold the WA's largest student planting day. Through their *Million Trees Program (MTP)* they will coordinate planting of 10 000 seedlings by students from Primary and Secondary schools. The two day event will be held on 9th and 10th June, from 10 am to 2 pm. Students will be replanting the banks of the Canning River in Beckenham. Busy workers will be rewarded with some music from a bush band and a DJ, sausage sizzle and MTP beans.

Other MTP planting days are listed below:

Tuesday 28th June at Stuart Park Memorial Grove, Greenmount

Friday 8th July at Carmel Memorial Grove, Carmel

Sat 16th & Sun 17th July at various verges around the City of Swan as part of the *Native Verge Scheme*

TBA Mid August at Helena River, Midland

For time and meeting place phone 9274 2875 or email mtp@menofrtrees.com.au

MTP in cooperation with the Water Corporation are running a new *Native Verge Scheme* for residents of the City of Swan. Local schools are growing native seedlings that will replace dry and introduced verge lawns around houses where residents will choose to be part of the scheme. Interested residents are asked to contact Melanie on 9274 2875.

Quinns Rocks Environmental Group

Celebrates its 20th birthday in June. The Group was formed in 1985 in response to proposals to build a rubbish tip and a marina in the local area. Despite both the rubbish tip and the marina being built the Group went on.

We are still lobbying for conservation of the remaining bushland. Members also undertaken bush regeneration in several local reserves, clean-up days, walks and ecological surveys. Hosted several workshops and seminars addressing different environmental issues. QREG published a booklet, *Discover Your Local Bushland*, two reports on remnant vegetation and several brochures. The latest one, *Grow Local Plants*, is promoting the use of local plants in suburban gardens. QREG holds bi-monthly meetings, often inviting guest speakers to talk on different issues.

QREG hopes to celebrate with many of the past and present members and supporters by hosting a special dinner in a local café on Friday 24 June.

And then we are back to work as on **Sunday 26 June** first of the series of planting days will be held at Mindarie Foreshore Reserve. Seedlings from locally collected seeds were grown with the assistance of the Coastwest Grant in cooperation with the City of Wanneroo. All helping hands welcome. Meet at the Tuart Grove carpark on Long Beach Promenade, Mindarie at 9.00 am. Hard workers will be treated with a barbeque lunch.

The second planting day will be held on **Sunday 10 July** at

Gumblossom Reserve in Quinns Rocks. Focus will be on revegetating parts of Banksia woodland. Meet at Gumblossom Community Centre carpark, off Tapping Way Quinns Rocks at 8am.

The third planting day will be on **Sunday 14 August** at Quinns Beach bushland, behind the caravan park. Meet at the carpark off Quinns Road, Quinns Rocks at 8 am.

Graceful sunmoth

News about a recent spotting of Graceful sunmoths (*Synemon gratiosa*), an Endangered species, in our local reserve was welcomed and spread excitedly. After the disappointment over damage caused by the Council workers installing a path/fire access track through Gumblossom Reserve, it was on that path where Phylis Robertson spotted several Graceful Sunmoths.

They are medium sized, day-time-flying moths with orange coloured hindwings and clubbed antennae. According to A. Burbidge (in *Threatened animals of Western Australia*, 2004) this species is known only from 13 locations on the Swan Coastal Plain, from Neerabup to Mandurah and in the last decade it has been recorded only from Neerabup, Whiteman Park and the Koondoola Regional Bushland. Phylis suggested that they were also seen in Warwick Open Space bushland.

Gumblossom Reserve includes about 5.5 hectares of bushland made up of several plant communities, including a *Banksia attenuata* woodland and open mixed shrublands, including a Priority species *Hibbertia spicata* subsp. *leptotheca* (P3). It provides habitat to the Southern Brown Bandicoot, 19 bird species, including the Endangered Carnaby's Cockatoos, 18 reptile and 1 frog species. Spotting of the Endangered Graceful Sunmoth in this relatively small urban bushland reserve clearly demonstrates the significance of such a reserve and makes all the past and present QREG efforts worthy.

APACE Aid Inc is offering a new round of courses *Introduction to Bush Regeneration*. The APACE Bush Regeneration course introduces participants to fundamental principals of bushland regeneration through both theory and practice.

Introduction to Bush Regeneration 2005

Saturday course: **August 6, 13, 20 and 27**

Weekday courses: **August 22,23,24 and 25**

September 5,6,7 and 8

For further information or to register contact APACE on (08) 9336 1262 during business hours.

APACE also makes specialised **Bush Tools** to order. Hand tools for revegetation work, around the home or down on the farm. Peter levers and planting tools that are versatile and strong, to make weeding and planting a little easier. If you are interested phone 9336 1262 to find out more.

Wildflower Society WA will be hosting a National Conference **West's Wonderful Wildflowers** from Saturday 1st to Friday 7th October 2005 at Hale School in Wembley Downs. Three days will be devoted to lectures and two days to guided field excursions. A series of speakers and excursion leaders have been invited to present a comprehensive program.

For an enrolment form and the program contact the Perry House office on 9383 7979.

Group News Group

Wildflower Society WA runs free monthly guided nature walks in different reserves. See seasonal changes in plant and animal life in a bushland near you. The walks start at 8 am and run approximately for 1 hour.

Each month on

1st Saturday (odd month) Meet Landsdale Rd approximately 250 metres west of Alexander Drive (contact Phylis phone 9349 9105)

1st Saturday (even months) Landsdale Conservation Park behind Landsdale Rd approx 100 metres east of Evandale Rd Darch (contact Phylis phone 9349 9105)

2nd Saturday (odd month) Errina Rd bushland beside Highview Park. Meet in Highview Park car park at eastern end Errina Rd Alexander Heights (contact Phylis phone 9349 9105)

2nd Saturday (even month) Koondoola Regional Bushland - meet at Koondoola Avenue opposite Burbridger Ave (contact Elizabeth phone 9342 0616)

3d Saturday Lake Gwelup Reserve. Meet Scout Hall carpark near tennis courts Huntriss Rd Gwelup (contact Betty phone 9444 5640)

4th Saturday Star Swamp bushland. Meet at Henderson Environ. Centre, Groat St, North Beach

5th Saturday Trigg bushland—meet in carpark between St Mary's School and Millington Reserve (off Elliot Rd) Karrinyup

Bushland Restoration Days for 2005

YOU are invited to come along and get involved in **hands on bushland restoration** activities such as weed management, monitoring and mapping, direct seeding and planting.

At
BRIXTON STREET WETLANDS

The workshops are held on the 1st Wednesday of the month:

July 6th
August 3rd
September 7th
October 5th
November 2nd

9.00am –12.00pm

Meet at the Alton Street gate and bring along your wellies.

&

At
TALBOT ROAD BUSHLAND

The restoration days are held on the last Friday of the month:

June 24th
July 29th
August 26th
September 30th
October 28th
November 25th

9.00am –12.00pm

Meet at the corner of O'Connor St and Talbot Rd.

Morning tea provided. Bring a hat, water and good walking shoes.

For more information or to register your interest contact Kate Brown **9474 7032**, Renee Miles **9474 7053** or Grazyna **9474 7052**



PERTH REGION PLANT BIODIVERSITY PROJECT —BUSH FOREVER REFERENCE SITES

Perth Region Plant Biodiversity Project, a collaborative project between the WA Local Government's Perth Biodiversity Project, Department of the Environment and the Department of Conservation and Land Management, is seeking comments on the selection of **Reference Sites** and their promotion as good examples of their type for the public to visit.

Forty representative and accessible *Bush Forever Sites* were chosen to be designated *Reference Sites* for public education about Perth's unique plant communities across the Swan Coastal Plain. For each site a *Reference Site File* is being prepared for public release. These files will contain plot based information from different botanical surveys and other relevant information about each site, previously not readily available. At each site a suitable *Photo Reference Points* were selected to document representative plant communities within that site.

If there is general information about the site you are interested in that you would like to add, please contact Karen Clarke on 9222 7074 **before the end of June 2005**.

Bush Forever Reference Sites (Bush Forever Site number): 48 Kensington Bushland, 89 Marourbra Ave Bushland Bullsbrook, 97 Kirby Rd Bushland Bullsbrook, 201 Koondoola Regional Bushland, 202 Warwick Open Space Conservation Area, 204 Star Swamp Reserve, 214 Ashfield Flats, 218 Shenton Bushland, 224 Canning River Regional Park, 244 North Lake & Bibra Lake, 292 Bullsbrook Nature Reserve, 293 Shire View Hill & Adjacent Bushland Nowergup/Neerabup, 295 Flynn Dr Bushland Neerabup, 299 Yellagonga Regional Park, 306 Talbot Rd Bushland Stratton/Swan View, 307 Lightning Swamp, 308 Trigg Bushland, 312 Bold Park, 313 Swan View Saltmarshes, 315 Swanbourne Bushland, 320 Hartfield Bushland Forrestfield, 321 Brickwood Reserve Byford, 322 Burns Beach Bushland, 325 Coastal Strip from Burns to Hillarys, 331 Blackwall Beach, Point Walter, Alfred Cove, 333 Canning River Foreshore, 341 Woodman Point, 345 Forrestdale Lake, 346 Brownman Swamp, Mt Brown Lake Henderson, 348 Modong Nature Reserve, 349 Leda Bushland, 352 Cardup Nature Reserve, 356 Lakes Cooloongup & Walyungup, 360 Mundijong & Watkins Rd Bushland, 377 Port Kennedy, 387 Greater Brixton Street Bushland, 389 Acourt Rd Bushland Banjup, 395 Paganoni Swamp, 399 Melaleuca Park Bullsbrook/Lexia, 491 Swan River Backwater South Guildford



NEW PUBLICATIONS



New brochure

Kate Brown and Grazyna Paczkowska of CALM's *Urban Nature* have compiled another excellent brochure entitled ***The Perennial Tussock Forming Grass Weeds.***

The brochure is packed with useful information which is well set out and easy to read. It starts with general information about these serious weeds including drawings and descriptions of the stages of growth. On the back are tips for developing a weed management strategy and a reference list. Opening the brochure out, it tabulates 20 grassy weeds giving basic biological information to help us understand how these plants grow, when they flower, how they disperse seed, and how they respond to fire. Then it gives suggested methods for management and control. Additional 'interesting biology' is given for our *betes noire* Tambookie Grass, Love Grass and Perennial Veldgrass.

Copies are available from *Urban Nature* at CALM Swan Region, PO Box 1167, phone 08 9368 4299. Published by the *Environmental Weeds Action Network (EWAN)*.

Make sure your group and your local Council each have copies.

The Western Suburbs Greening Plan Guide

'Wildflowers and other local plants for your garden'

is now available. This practical booklet has been produced by APACE Aid WA and Earth Carers to assist residents of the western suburbs to choose and establish local plants in home gardens. For more information contact Anne Pettit at Earth Carers by phoning 0419 098 748 or email anne@townofmosmanpark.wa.gov.au

Insurance for Community based Volunteer, Landcare, Coastcare and other Environment Groups

From 1st April 2005, the National Landcare Insurance Program is underwritten by Allianz Insurance Australia Limited (AFS Licence No 234708), an Australian Insurance Company approved by Australia Prudential Regulatory Authority.

The current broad cover, low excess and cost (\$300.00 in total for each group per year) will remain unaltered for the 2005-2006 year.

The Product Disclosure Statement for the Personal Accident/Voluntary Workers section of the policy can be viewed on

www.aradlay.com/landcare

Alternatively contact Narelle Grosser on (02) 9953 7722

Western Australian Environment Forum

Piers Higgs, an environmental and technology consultant, has launched a web site under the banner of the "Western Australian Environment Forum". It provides a free forum where people can exchange their experience and information on environmental issues in Western Australia.

The forum includes three main areas. The first is a general discussion area designed for discussions about the environment, and can be used for general discussions or even specific questions that people have. The second area is an event register, where Piers has been posting a range of events that he hears about – but anyone is free to post their particular event on the web site. The aim is for people to be able to not only post the actual details of the event, but people who can't make it can also read summaries that are posted by people that can make it. The final area is aimed at environmental researchers who wish to ask particular questions, or are after particular help (be it volunteers for the field, or for technical help with software).

The forum can be accessed at <http://www.gaiaresources.com.au/phpBB2/index.php> or directly from the Gaia Resources web site

Invitation to participate in TV Series

THE FOREST QUESTION A Layperson's Guide

Community Television Perth is producing a short series about the future of the Western Australian forests.

If you are not camera shy and feel strongly about our forests, register your interest by calling

Michael K Ewin
Series Producer

On 9221 5355

WATER LAW IN WA

An Environmental Defender's Office WA CONFERENCE

Friday 8 July 2005

Elizabeth Jolley Lecture Theatre
Curtin University of Technology

For more information about the conference program and speakers visit the EDO WA website www.edowa.org.au or phone 9221 3030

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 \$30 a year (GST included). A growing membership strengthens the cause and groups benefit from the network.

Individuals:

Supporter membership is only \$20 per year (GST included). Supporters can attend meetings and receive copies of the "Urban Bush Telegraph"

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

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

UBC meetings

Tuesday 5 JULY 2005 at 7:30 pm

Speaker: John Weaver: Using GPS, Camera and Computer to Record Your Funfus

Tuesday 2 AUGUST 2005 at 7.30 pm

Speaker: Peter Mawson: Feral Bees

Followed by SPECIAL GENERAL MEETING to approve amendment to the UBC Constitution

Tuesday 6 SEPTEMBER 2005 at 7:30 pm

Speaker: Dr Steve Hopper: Biodiversity in the Perth Region

Meetings are held at the National Trust building, 4 Havelock St, West Perth

All interested are welcome.

UBC PUBLICATIONS

***Wetlands to Wastelands?* - proceedings of a seminar about the future of bushland at Perth Airport (2004)**

Available at UBC's website

<http://members.iinet.net.au/~ubc/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). Available from the UBC for \$11, postage included.**

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

NEWSLETTER ITEMS

Editor: Renata Zelinova

PLEASE SEND CONTRIBUTIONS TO:

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PO Box 326 West Perth WA 6872

or fax (08) 9420 7208, email ubc@iinet.net.au

If possible, send contribution on floppy disk in IBM format. Disks will be returned.

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