

# CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

April 1992

## Report urges integration

**THE Resource Assessment Commission's final report into forests and forest industries throughout Australia recommends that the concept of the integrated land management agency, pioneered in WA by CALM, should be adopted throughout Australia.**

The RAC report, tabled in Federal Parliament earlier this month, generally endorses Western Australia's approach to forest management.

Environment Minister Bob Pearce said that he was pleased that the final report had concluded WA was practising sustained yield of timber in native forests.

In their earlier draft report, the commission had claimed that they had not received evidence that this is the case.

Mr. Pearce said that the commission had also concluded the cessation of timber harvesting in native forest could not be justified.

"I am also pleased that the commission has endorsed the agreement between CALM and the Australian Heritage Commission as a model for the rest of Australia," he said.

He said the report was

long and complex and included issues and suggestions relating to WA's forest and conservation estate.

CALM Executive Director Syd Shea also welcomed the release of the RAC's final report, and said it signalled the dawning of a new era for Australian forestry.

"Since the 1970s there have been over 30 inquiries into Australian forests, and the community can no longer tolerate the cost, forest managers can no longer operate in a policy vacuum, and the forest industries can no longer cope with uncertainty," Dr. Shea said.

"The Resource Assessment Commission has confirmed the legitimacy of all traditional uses of the forest, including timber harvesting. But it's important that industry continues to work with State forest agencies to ensure that forests are protected, forest processes are sustained, and that all users are catered for in an equitable way."

Dr. Shea said that the key to the future of the forest and the hardwood forest industries was integrated management.

## Interest in flora blossoms at Boyanup



Boyanup Primary School students studying wildflowers: (left to right) Daniel Pedlar, Naomi Pedlar, David Brockman, April Bristow and Aaron Gendall. Photo by Geoff Paynter courtesy of The South West Times

**BOYANUP Primary School students have discovered a rare species of donkey orchid (*Diuris amplicimia*) while participating in Greening Australia's "Grow Us a Home" competition.**

The competition was run to interest schools in growing native plants as habitat for native fauna.

Teachers and students from Boyanup Primary School became involved

by  
**Michael Tichbon  
and Bob Selkirk**

and invited Bob Selkirk, a CALM senior forester from Harvey District, to introduce the class to some basic environmental concepts and land management methods.

The school entry won in its section and received funding for the 750 plants

required to revegetate the chosen site.

With the hard work beginning - and a blossoming interest in native plant identification, the need for an adequate herbarium soon became apparent.

### Flora expert

Boyanup resident and local flora expert Michael Tichbon volunteered to help the class collect and

identify specimens for their herbarium.

Year 5 and 6 students aimed to collect all native plant species within the Capel Shire. Work began on July 4 last year and is expected to continue until December this year.

Over 400 species have so far been collected, including 34 orchid species, 25 species of triggerplants, 20 wattle species and a large number of pea-flowered plants.

After the specimens are collected, each is carefully pressed, mounted, identified and grouped into families, then stored in lever arch files.

The rare donkey orchid was found growing in the Boyanup-Capel railway reserve. This species is known to have existed in the Boyanup-Donnybrook railway reserve over 40 years ago, but no longer grows there. There are now less than 100 of these plants left, so urgent action is needed for their protection.

The endangered Marchant's drosera (*Drosera marchantii*) was found by the children in significant numbers in the Donnybrook and Argyle forest blocks and in the Boyanup-Donnybrook railway reserve.

Other populations of rare species were found in the area, including lanoline bush (*Franklandia triaristata*), *Pultenaea skinneri* and *Acacia flagelliformis*.

Many unidentified specimens were found, including a small *Caladenia* species, a yellow

*Hypocalymma* species, a plant thought to be a *Petrophile*, a small white *Drosera* and a white *Dampiera*.

"We are continuing to collect interesting and unusual plants, so I am confident that more important discoveries will be made," said Bob Selkirk.

The children turned up a few other surprises: pom-pom Darwinia (*Darwinia vestita*), which is more typical of the southern sandplains, and *Acacia cuteola*, which usually only occurs east of Albany.

"This project could be a forerunner to many more such projects at schools throughout the State. All that is needed are interested students and staff, suitable areas in which to collect the plants, and someone with botanical and local knowledge to act as a guide."

"The project would not have been so successful but for the great amount of effort and time spent on it by the school's science teacher Clare Parry."

When the Shire collection is complete, a further collection of flora of the Whicher Escarpment and adjacent areas could be compiled. This would be an important project, as the flora is very rich and diverse, and the escarpment is subject to mining and mining tenements.

It is hoped that a conservation project will be established to protect the great wealth of flora along the Capel-Boyanup railway reserve.

## Launch for South Coast plan

**THE South Coast Regional Management Plan was officially launched by Environment Minister Bob Pearce last month.**

The plan was four and a half years in the making and was put together by a "cast of thousands".

"Dual launch ceremonies were held in Albany and Esperance - the two major centres in the region - as we thought it was too important an occasion not to involve all regional staff," said regional planning officer Ian Herford.

### Significance

In launching the plan, Mr Pearce highlighted the international significance of the region, including:

- \* a world biosphere reserve at Fitzgerald National Park;

- \* wetlands of international significance declared under the RAMSAR Treaty (the Lake Warden system near Esperance);

- \* internationally acclaimed work on rare

by Ian Herford

species management such as with the noisy scrub-bird; and

- \* cave sites on the Nullarbor Plain.

"The plan presents a comprehensive review of land use and tenure within the region," Mr Pearce said. This review, which led to the release of 170 land use proposals in the Draft Plan, was spearheaded by South Coast regional manager John Watson.

The final plan includes recommendations for considerable additions to the conservation estate, including:

- \* adding over 15 000 ha to the Fitzgerald River National Park;

- \* creating an important national park on the Nullarbor Plain (following recommendations co-authored by CALM research scientist Norm McKenzie);

- \* changing Nuytsland Nature Reserve to a

national park to better reflect its recreational and conservation values;

- \* creating new nature reserves along four important river corridors in the region linking coastal areas with uncleared land further inland; and

- \* tripling the Waychincup National Park, near Albany, in size.

This is CALM's fourth regional management plan. The draft plan was prepared

by John Watson and released for a five month public comment period. Public submissions were analysed by Ian Herford and Lotte Lent (now working in the Community Education section) and the draft plan thoroughly revised.

### Framework

"The plan will provide the framework for activities in the region for the next ten years. Now all we

have to do is implement it," said Ian.

In a light hearted conclusion to the Albany launch, the South Coast Region's Terry Passmore and Ann Burchell presented Ian with a memento of the occasion - a plastic boat, the "Regional Plan Launch", complete with CALM logos and a miniature copy of the plan.

Photograph by Terry Passmore





One of the worst things an organisation or an individual can develop is what is colloquially termed "the up yourself syndrome".

At the same time, it is also true that if an organisation and individual never feels it is achieving anything, morale will suffer.

In the last few weeks there have been a number of significant, independent evaluations of CALM, which I believe give us some reason to be pleased with what we have achieved over the last several years. The most recent independent acknowledgment that CALM was doing at least some things right has come from the Resource Assessment Commission.

The Commission has enthusiastically endorsed the concept of an integrated land management agency, confirmed that we are managing our forests on a sustained basis and highlighted the CALM/AHC as a model, which should be worked at throughout Australia.

It is important to acknowledge that we have as an organisation achieved some success - but we should only contemplate this success for 3 milli seconds. We are entering a period of massive change and if we do not continue to respond to this changing environment, like animals and plants we will become extinct.

Throughout Australia, all public organisations regardless of the political make up of the respective governments, are facing significant reductions in their budgets. In organisations like CALM, which are facing an ever increasing demand for services, this represents a major threat. Part of the reason why CALM has been successful is that we have been able to provide a reasonable degree of service to our myriad of constituencies. If the reduction in funding which will inevitably occur, results in a diminution of service, progressively all of these constituencies will become antagonistic to the Department. CALM, if this scenario is allowed to occur, will not collapse with a bang; worse it will suffer the death of a thousand cuts.

Consequently over the last week the Corporate Executive, and more recently the Regional Managers, have been meeting to devise a strategy to avoid this hopeless scenario. In short, what we need to do is to be more efficient and earn more revenue.

Over the next several weeks the Corporate Executive will be providing you with more detail of what we believe has to be done.

But individuals in the Department don't have to wait. One of the obvious things that has happened in the Department over the last several years, in part as a legitimate response to the need to consult widely within and outside the Department, has been the development of a cumbersome system of decision making and associated "bureaucratise".

While it's important that we have order and discipline in our organisation, that should not stop us being flexible and innovative.

In short, bureaucratic cholesterol is clogging CALM's arteries. Everybody has a role to play in freeing up the system.

Dr Syd Shea, Executive Director

# Rory a JP

by John Hunter

RORY Neal, national park ranger at Augusta, has been made a Justice of the Peace.

Rory became a park ranger in 1979 and after the traditional training time at Yanchep, was posted to Walpole-Nornalup National Park.

Within a short time, Rory realised that rangers and their families were in a vulnerable and remote position. He started working towards the formulation of today's Rangers Association, of which he is currently President.

Rory, who is closer to the top of a karri tree than anyone else and just as heavy, easily accommodated the cold climate of the south coast. He soon made his presence known to national park visitors.

In 1986 Rory was appointed a member of the National Parks and Nature Conservation Authority on which he still serves.

Rory transferred to Leeuwin - Naturaliste

National Park at Augusta in 1987, a move which was good news, as he could still pursue his favourite pastimes of target shooting and fishing.

Some two years ago, it was decided that Augusta needed a high profile local representative to serve on the bench of the local petty court and in January last, Rory was sworn in as Justice of the Peace.

Rory and wife Ali love Augusta and find it a superb environment with great neighbours and friends.

Ali works part time as a nurse for the Silver Chain and also serves as a volunteer for helping the aged in the district.

It is tremendous that our staff in distant places are setting a fine example of service to the community.

Rory Neal, JP, on the job in Leeuwin-Naturaliste National Park.  
Photo by Jim Williamson



# Ocean oil spills workshop

A NATIONAL scientific workshop on maritime oil spills was held in Fremantle in March.

The workshop, run by the Department of Marine and Harbours and the Australian Maritime Safety Authority, looked at developments in

technology, research information, case studies of oil spills in Australia and overseas, how to deal with the media and many other subjects.

Issues included short and long term effects of oil on the environment, the disposal of recovered oil, ports of refuge, the toxicity of dispersants and the question of safety of ships in Australian waters.

## Representation

CALM was represented by Coastal Waters District manager Greg Pobar and technical officer Peter Dans, and communications officer

Tanya Maxted from Corporate Relations Division.

The workshop ran for five days and involved about 40 people from around Australia.

Authorities represented included the environmental protection authorities from all states, Great Barrier Reef Marine Park Authority, Northern Territory Conservation Commission, the Victorian and Tasmanian departments of conservation and environment, as well as research institutions.

Industry was represented by WA Petroleum, ESSO and BP.

On day two of the

workshop, media training was run in conjunction with exercises on dealing with oil spills for participants.

As participants were grouped into syndicates and given scenarios of oil spills which they had to deal with, four 'media' people began to emulate real life, and try to get information for newspapers, radio and television.

Tanya Maxted joined Radio 6NR talkback host Sandra Farnsworth, Westrail Public Affairs Manager Paul Burns and Department of Transport Public Affairs Manager Tony Noakes in the exercise.

A morning and afternoon scenario was run, and an evaluation of each group's performance given.

The result was a greater understanding of the need to service the media during an emergency appointing a media liaison officer and keeping media from interrupting vital operations work.

Then on day three, following a discussion panel consisting of people involved in both the Sanko Harvest and Kirki oil spills, Greg Pobar took participants for a tour of Shoalwater Islands Marine Park.



## STAFF NEWS

### Transfers

Mitchell Davies, Forest Ranger, to Manjimup District; Nigel Sercombe, Forester, Dwellingup District; Janet Webster, Officer, Como Research; Rod Annear, Information Officer, Kelmscott; Neil Pettit, Research Scientist, to WAWA.

### Mobile Ranger Moves

Mobile park rangers will move to the following locations for the start of the winter period - from late April.

Kimberley Region - Arvid Hogstrom, Purnululu; Kevin Hughes, Ian Hughes, Geoff Passmore and Scott Godley, Geike Gorge; Ernie Fagan and Bill Badcock, Windjana Gorge.

Greenough/Gascoyne Region - Barry Cartledge, Coral Bay; Jason Puls, Cape Range; Terry Bloomer, Mt Augustus.

Swan Region - Tony Tapper and Mark True.

South Coast Region - Paul Udinga and Dave Milne, Albany District.

THE following publications were produced recently and should be available from Stores Branch at Como, the Enquiries Office at Como or, if already out of print, the Resource Library at Como.



### Books

- \* The Karri Forest. A full colour book.
- \* Reprint - Wild Places Quiet Places.

### Strategies

- \* A Nature Conservation Strategy for Western Australia - Draft for Public Comment.
- \* Future Directions for Nature Conservation - Summary of the Draft: A Nature Conservation Strategy for Western Australia.
- \* Management Strategies for the South-West Forests of Western Australia - A Review - A draft for Public Comment.

### Reports

- \* National Estate Values in the Southern Forest Region of South-West Western Australia - Volume 1 Draft Report.
- \* Ditto - Volume 2 Appendix 1 - Assessment Methodology.
- \* Ditto - Volume 3 Appendix 2 - Values in Indicative Areas. Appen-

dix 3 - Values in Nature Conservation Reserves.

\* Ditto - Volume 4 Appendix 4 - Australian Heritage Commission Guidelines.

\* Ditto - Volume 5 Appendix 5 - CALM Proposed Forest Management Practices.

\* Proposals to Amend the 1987 Forest Management Plans and Timber Strategy. A report.

\* C.E. Lane Poole Memorial Trust - Study tour 1990-91.

\* Plantation Forestry in Western Australia - Achievements and Prospects.

\* Growing high-quality hardwood fibre. A proposal for the establishment of a hardwood afforestation Project in the Bunbury Region.

\* Application of Dendrochronology, Stem Analysis and Inventory Data in the Estimation of Tree and Stand Ages in Karri Forest - Technical Report No. 27.

### Brochures

\* Go Bush in the Hills Forest.

\* Help Grow an Earth Caretaker.

\* Reprint - Boyinaboat Reef Underwater Nature Trail - Marmion Marine Park.

\* Recreation Sites of the Goldfields Region.

\* Reprint - Marine Turtle Identification and Tagging.

\* Reprint - CALM Regional, District and Local Offices

Management Plans

\* South Coast Region - Regional Management Plan 1992-2002.

\* Ditto - Analysis of Public Submissions 1992.

Occasional Papers

\* Drupella comus: A synopsis - Proceedings of a Workshop. Occasional Paper 3/92.

\* Application of Modern Inventory Techniques in the Forests of Western Australia - Occasional Paper 1/92.

### Resource Notes

\* Reprint - Eucalypts of Perth: Field Keys - Resource Note No. 21.

\* Reprint - Mapping Plants Along a Transect - Resource Note No. 22.

### Other

\* LANDSCOPE'S Urban Wildlife Antics - Teachers' Manual.

\* LANDSCOPE'S Urban Wildlife Antics - Stories.

\* An Updated Forest Strategy - a newspaper.

\* Park Notes - Nambung National Park Bushfire.

\* Midge Notes No. 4 - Completion of the research program.

\* Training and Development Manual 1992.

\* Memorandum of understanding between Australian Heritage Commission and CALM concerning national estate values in the Southern Forest.

\* Timber Harvesting in Western Australia - Code of logging practice and manual of logging specifications.

## CALM NEWS - APRIL 1992

Managing Editor: Ron Kawalilak

Editors: Carolyn Thomson and Helenka Johnson

Contributing Editors: Verna Costello, David Gough, Tanya Maxted

Design and Layout: Steve Murnane

Published by CALM Corporate Relations Division, Cygnet Hall, (cnr) Mounts Bay Road & Hackett Drive, CRAWLEY, Western Australia 6009  
Telephone: (09) 389 8644 Facsimile: (09) 389 8296

Deadline for CALM NEWS is the 10th of the preceding month.

# LANDSCOPE's national award

A GOLD medal and more than 1 300 new subscribers made March a banner month for LANDSCOPE.

CALM's flagship publication, now in its seventh year, beat dozens of other Australian magazines and was awarded the only gold medal in its class at the 9th National Print Awards in Sydney, NSW.

## Excellence

The award was for excellence in design, pre-production and printing and means automatic entry for LANDSCOPE later this year in the Printing industry of America international competition.

A silver medal in the same class was awarded to a national magazine produced by *The Australian*.

At a follow-up award ceremony organized in Perth, Deputy Premier Ian Taylor presented gold medals and certificates to Lamb printers and other LANDSCOPE suppliers, to CALM graphic designers Stacey Strickland and Sue Marais, and to Acting

Director of Corporate Relations Ron Kawalilak.

The gold medal is the second recent award for LANDSCOPE. Earlier in the year, the magazine and research scientist Jack Kinnear were awarded the Alex Harris Medal for excellence in science and environmental writing.

## Subscriptions

Coincidentally, the award came at a time when the magazine was having a major subscription drive. Launched with a full-colour insert in the March 15th edition of the Sunday Times, the subscription drive had added 1 352 new subscribers by the end of the month.

"When we began the year we had a target of adding 20 per cent to the paid circulation for LANDSCOPE," said Ron Kawalilak, who also acts as the magazine's Managing Editor. "With the success of the past month, we will do that with ease."

Ron said that one of the major impediments in the past to increasing sales of

the magazine has been that most West Australians were simply unaware of its existence.

"Because it sets out to not only inform but enrich and delight its readers, the magazine has always had an incredibly high percentage of subscribers who renew their support each year. The difficulty has been that we live in a large state with a small population, and that LANDSCOPE has been known only to a few people.

"Using the mass-market Sunday paper to whet the appetite of a much larger audience, we have been able to take a major step in making ourselves better known. We plan to use a similar insert later in the year, probably in September or October, to build the subscriber base even further.

For the recently-released Autumn edition, paid circulation of LANDSCOPE surpassed 9 000. A three-year marketing plan for the magazine has established a circulation target of 16 000.



From left: LANDSCOPE designers Stacey Strickland and Sue Marais, Deputy Premier Ian Taylor and LANDSCOPE managing editor Ron Kawalilak.

## Government gives duck bill second shot

THE State Government has reintroduced its bill to ban recreational duck shooting into the Upper House of Parliament.

Environment Minister Bob Pearce said the bill sought to ban recreational duck shooting in Western Australia to protect native wildlife.

"This Government believes our native wildlife should be protected, admired and respected, not shot for pleasure," Mr Pearce said.

"There is a widespread view in the community that the institutionalised killing of the State's wildlife is wrong."

The bill seeks to protect indigenous ducks, geese and quail from being shot for recreation and to eliminate the environmental damage caused by shooters to the State's fragile wetland nature reserves.

The Ministerial discretion to declare open seasons on ducks, geese and

quail so they could be shot for sport would be removed from the Wildlife Conservation Act, as would the capacity to prescribe licences in the regulations to allow recreational duck shooting.

## Repealed

As well, saving provisions in the CALM Act affecting classification of certain nature reserves as shooting or hunting areas and the regulations governing the taking of game species would be repealed.

However, the ability to make regulations to control the taking of fauna subject to damage mitigation arrangements would be retained in the Act.

Meanwhile, illegal duck shooting on the Murchison River is causing concern for CALM wildlife officers.

Wildlife officers have found fresh evidence along the river which indicates that shooters are illegally

taking wild ducks which are protected fauna.

Geraldton wildlife officer Kevin Marshall said that recently expended cartridges have been found on both sides of the river.

To stop offenders, trouble spots along the Murchison River are being specifically targeted.

Anyone offending could face fines of up to \$4000 and could have their firearms forfeited by the courts.

Wildlife officers have also found that in the same area, river gum branches containing hollows have been damaged. These hollows are used by waterfowl for nesting and their destruction or removal could adversely affect waterfowl breeding in the area.

The removal of hollows is an offence and also carries a penalty of up to \$4000.

## Desert Dreaming documentary

CALM's Desert Dreaming project will be featured in a major documentary on world-wide efforts to protect endangered species.

The big-budget documentary will eventually be shown all around the world. In Australia it will be screened on Channel 7.

The documentary will be directed by Peter Du Cane, of Australian Screen Associates, and produced by Mike Searle, of Story-teller Productions. Both men have outstanding credentials.

Peter recently wrote, produced and directed an outstanding documentary on Shark Bay and co-produced the 13-part FAUNA series with David Moore, while Mike wrote and directed *Lost Angels*, a documentary on the whale rescues at Augusta.

by Carolyn Thomson

The Shark Bay documentary topped the ratings on BBC2 the week it went to air (defeating Clive James' show) and *Lost Angels* achieved similar results.

"Mike and I believe that examples of 'good news' stories will have a much greater influence on all sides of the environmental debate than seeking out sensationalist negative situations," said Peter.

WAPET, who are major sponsors of the Desert Dreaming project, will provide assistance to the crew by way of airfares and accommodation during filming on Barrow Island.

WAPET's involvement

in the project will be clearly featured in both the visuals and narration of the film. The crew will film boobies and golden bandicoots being trapped on Barrow Island and airlifted to the Gibson Desert.

They also plan to spend about two weeks filming in the Gibson Desert - a far cry from the other locations in San Diego, London, Melbourne Zoos and the Bronx Zoo in New York.

Captive breeding of the swamp tortoise and numbat by CALM and the Perth Zoo will also be featured.

*CALM scientists are to patch burnt the release site in the Gibson Desert so that the mammals' habitat contains vegetation of uneven ages.*



## Yanchep advice

A COMMUNITY committee has been appointed to advise CALM on the management of Yanchep National Park.

Yanchep is the State's most popular national park, with an estimated total of nearly half a million visitors every year.

The ten member committee, which represents a broad cross section of the community, was appointed recently by the Minister for the Environment, Bob Pearce. Most members volunteer their time to the committee, which meets every six weeks.

The committee members are: Mr K Gibbs and Mrs P Philp, of Yanchep; Mr R Steer, of Wanneroo; Mr P Sandell and Mrs J

by Alan Briggs

Vines, of Two Rocks; Mr N Lynch, of Woodvale; Mrs S Harris, of South Perth; Mr T McVeigh, from the WA Tourist Commission; Councillor R Waters, from the City of Wanneroo; and Mr A Briggs, from CALM.

"Community consultation is an important part of CALM's work. This committee has a wealth of local knowledge which will be invaluable as we continue to look for ways of improving Yanchep National Park," said Mr Briggs, the Manager of CALM's Perth District.

For further information, contact Alan Briggs on 405 1222.

## Fire experts praise CALM

CALM's fire management program has been praised by a group of North American specialists on a study tour of Australia and New Zealand.

The team of nine from Canada and the United States inspected CALM's southern forest region - the fourth exchange tour to the region by fire experts from Australia and North America.

Tour leader for WA, Rick Sneeuwjagt, Manager of CALM's Fire Protection Branch, said the visitors were very impressed with the Department's fire management practices and with the professionalism of the officers they met.

## Impressed

"Tour members were particularly interested in our wildfire threat analysis, a system developed by CALM to identify and quantify the factors that combine to determine the priorities for fire suppression and fire prevention operations, such as prescribed burning," Rick said.

"In these times of financial restrictions, it's essential that the final selection of areas to be prescribed burned is the correct one.

"It must reflect management requirements and at the same time service community and forest protection needs."

CALM Senior Fire Control Forester, John Evans, took the group on inspections of prescribed burns and wildfire areas.

The group congratulated CALM on the pre-planning and implementation of aerial prescribed burns.

"They were particularly impressed with the degree of control achieved in very complex burns, where separate ignitions are needed to meet the required objectives," Mr Evans said.

The group includes senior specialists from a wide range of fire control disciplines, including fire research, aviation, fire management and fire suppression resource coordination, from the US Forest Service and Canadian forestry organisations.

# Focus on Collie district



Inspecting progress on a new toilet block at Honeymoon Pool are (left) Collie reserves officer Rob Brazell, Collie senior forester Alan Hordacre and Bunbury parks and reserves officer Neil Taylor.



Collie forester Glyn Yates demonstrates use of equipment on-site at a new bridge being built at Honeymoon Pool to new campsites.

## Recreation site for Wellington Dam

Story and photos by Tanya Maxted

THE Wellington Dam area and Collie River valley is being opened up as a major inland recreation site.

The dam is no longer used to supply drinking water since a second resource, the Harris Dam, was opened by the WA Water Authority in 1991.

Last summer swimming only was permitted in the dam.

This summer paddle craft were also allowed, and next year sail craft will be permitted.

In the past 12 months, 70 000 people visited the area - an increase of 20 000 over the previous year.

Collie forester Glyn Yates said that as CALM managed 80 per cent of the area (21 480 ha), it was heavily involved in its recreational development, plans for which were outlined in a tourism and recreation plan written for the area.

The Wellington Dam Advisory Committee co-ordinating the development consists of many authorities, including CALM, WA Water Authority, Leschenault Inlet Management Authority, South West Development Authority, local shires and community representatives.

Developments mooted included a caravan park,

chalets, motel and convention centres.

CALM has a team of specialists working on recreation sites on CALM-managed land in the area, consisting of district manager Peter Moore, Glyn Yates, senior forester Alan Hordacre, reserves officer Rob Brazell and Bunbury parks and reserves officer Neil Taylor.

Recreation and Landscape Branch staff Richard Hammond, Tracey Churchill, Steve Csaba and Gil Field are also involved.

### Camping upgraded

In the lower Collie River valley, CALM manages the area's major camping ground, Honeymoon Pool. With the development of the whole area, this camping ground is being upgraded to become the principal overnight camping facility.

The Honeymoon Pool camping ground will become user-pays with a self-registration system where tags are displayed on cars. Other existing camping areas will become day use only.

From Collie district's budget last year, \$25 000 went into the project; this year \$170 000 has been allocated through the Parks Improvement Program.

Existing toilets are being replaced, and new facilities built.

According to Glyn Yates, stage one of the upgrading - camping areas for family groups of between four and 10 people - will be finished this year.

The ensuing second and

third stages will see larger sites for groups (up to 50 people), and smaller, remote sites for individuals and couples with central facilities installed.

Collie has borrowed Harvey carpenter Gary Davidson to give general training to forest workmen involved in the development program. In exchange, Collie will help Harvey with its fauna program.



Collie forest workman Dean Guest removes bark from a log that will become part of a bridge at Honeymoon Pool.

Stories and photographs by Tanya Maxted

## Catchment reforestation

AN 8 000 hectare target for reforestation in the Wellington Catchment, set in the late 1970s, will soon be achieved through a unique cooperative effort between CALM and the Water Authority.

Collie forester Morten Nilsson said the program, which is designed to reduce the saline runoff from the previously cleared land into the Wellington Dam, involves WAWA identifying the most severely degraded sites.

WAWA purchases the land from the farmers and then contracts CALM to prepare, replant and manage the new forest on their behalf.

The long term goal of the program is to reduce the levels of salinity in the Wellington Dam so that the water can once again be used for human consumption.

Some of the other benefits of the project include providing a timber resource for the future and providing wildlife habitat and bush corridors, as well as winter time employment for CALM.

Over the years the program has tried a wide

variety of species to come up with the optimum for the area.

The species used now have been reduced to three: Tasmanian blue gum (*Eucalyptus globulus*) on the upslope free draining sites, red river gum (*E. camaldulensis*) on poorly drained sites showing some signs of salination and salt sheoak (*Casuarina obesa*) on areas denuded due to very salty conditions.

The preparation process for each year's program usually starts some 18 months prior to planting, to enable the full range of planning and preparation to take place. This includes purchase of land, fencing off the area, ripping, mounding and weed control.

The 1992 program will involve 120 hectares of new plantings in an area 40 kilometres east of Collie.

If the 1991 season is any guide the season will be a good one - the recently completed survival counts of last year's program have shown an excellent survival rate in excess of 90 per cent. Some of the trees are already over two metres high.

## Plans for demonstration forest

THE development of the timber management component of Collie's demonstration forest at Wellington Mills is on track and, it is hoped, will be opened for the first public tour this autumn.

A small area within the 450 ha forest which adjoins a Ministry of Sport and Recreation cottage camp, has been treated.

Current CALM silvicultural prescriptions have been used, to make it easy for people to see for themselves what thinned and unthinned stands look like, what a regeneration gap is and also some of the timber products.

### Real model

Collie forester Jim Raper who has been overseeing the timber project said the idea is to make sure it is a real model of how CALM operates in the forest.

"There is no intention to hide any aspect of the operations," Jim said.

He said that in a few years' time the treatments would be repeated so that people could see the development of regeneration and growth of the forest in that time.

Parts of the forest will remain unlogged so there will always be a comparison between treated and untreated forest.

The demonstration forest is one of five proposed in the recent Forest Strategy to be created in the south-west.

The others are in Mundaring (Hills Forest), Dwellingup, Margaret River and Big Brook in the Southern Forest Region.

Central Forest regional manager Don Spriggins, who introduced the idea of demonstration forests into CALM, said the idea was to provide people with an

outdoor classroom experience of a forest.

The aim is to show people a compact area of forest where they can see the main elements of a forest ecosystem such as the soils, vegetation, animals, fire, and disease.

This then leads on to how the forest is managed to sustain the production of all the values the community wants from a forest.

Don said the first public tours would give some feedback on what people were interested in and wanted to know more about.

### Interpretation

"We won't be thinking about erecting signs or providing interpretation information until we know what works and what doesn't," Don said.

Don said that how fast the project develops de-

pends on staff availability and funding.

If the idea catches on, each demonstration forest would need a full time person as a coordinator.

In the case of the Collie demonstration forest, the hope was to eventually erect a high fire tower within the forest which visitors could use to get a bird's eye view of the forest and how it was being managed.



Collie forester Jim Raper points out the attributes of a thinned forest that will soon be on show to the public.

# Gulf war on goats

HAVE you had trouble getting anyone to answer the phone at the Shark Bay Office over the summer? Well, the reason is that the district staff have been undertaking an intensive program of eradicating feral goats and sheep from Peron Peninsula.

The work has kept ranger-in-charge Rex Walker and CEPANCRM contractor Arthur Pepper busy from dawn to dusk. I ensured that district manager Ron Shepherd does not get soft office hands.

Even the office clerical officer Olwyn Averill, has been seen in a trap yard eye-to-eye with a big billy.

## Destocking

After successful destocking of the ex-Peron Station last summer (approximately 17 000 sheep were mustered), the goat population bred up during the wet winter.

This is part of CALM's involvement in the Statewide Goat Eradication Campaign being co-ordinated by the APB and Land Conservation Districts.

Peron Peninsula has been one of the most successful programs in the campaign.

To date 3 350 goats and 600 sheep have been destroyed on the Peninsula and about 6 000

by Ron Shepherd

rounds of ammunition have passed through the District Office in the last three months.

A final exercise this summer will be to eradicate all feral animals from a 10 kilometre prong of land west of Big Lagoon that is only accessible on foot.

To complete this, 20 Army Reserve officers and the district officers are planning a military-style attack!

When feral animals are eradicated on this prong, the area may be considered for a future reintroduction program of the endangered Shark Bay mouse.

Of course, there have been a few lighter moments to the destocking program on Peron. During the Gulf War Ron Shepherd was seen walking through Perth airport with a rifle on his return to Shark Bay.

And recently a nervous acting director for nature conservation was requested to include 1 000 rounds of .308 military ammunition in his luggage on a flight to Geraldton.

CALM hopes to extend the goat eradication program to other reserves in the Gascoyne region during 1992 and 1993.

# They'll be riding on the horses

COMMUNITY members were invited to give rein to the sometimes controversial question of horse riding in John Forrest National Park at a recent workshop.

The workshop was organised as part of the preparation of a draft management plan for the State's oldest national park, which overlooks Perth.

## Meeting

More than 30 people attended the meeting, representing horse riders, conservation groups, local and State government, the NPNCA and CALM.

While there is a long history of horse riding in the park, most of the tracks used weren't designed for anything more than checking fire breaks and so on.

Their regular use has led to erosion and the spread of weeds.

The workshop gave

by Jacqueline Pontre

everyone involved the chance to put their views forward and discuss possible compromises between those who love riding in the park and those worried about its effect on other park values.

Ideas raised ranged from creating special conservation areas where riding would not be allowed to carrying out contour surveys and realigning riding trails.

All of these will be valuable input to the horse riding section of the draft plan.

The results of a brief survey at the end of the night found everyone who took part felt the workshop had achieved something.

The draft management plan is expected to be released for public comment by the middle of this year.



CALM's Noel Nannup has taken up a position as Aboriginal liaison officer based at Narrogin. Photo by Tanya Maxted

# Aboriginal liaison officer joins CALM in Narrogin

**AFTER nine years' experience as a ranger-in-charge, including seven years at Geikie Gorge National Park and two years at Millstream National Park, Noel Nannup is breaking new ground as the first Aboriginal liaison officer appointed by the Department of Conservation and Land Management.**

After two and a half years studying cultural heritage management in Canberra, Noel has returned to Western Australia to take up the

position of Aboriginal liaison officer based in Narrogin.

Although based in CALM's Wheatbelt Region, Noel will also have some responsibility for Aboriginal issues on CALM managed land in the Central Forest, Southern Forest, and South Coast Regions.

"I'm very happy to be taking up this new position which, although it will be difficult, will be challenging and rewarding," said Noel.

"With the release of

the CALM report *Aboriginal Activities and Nature Conservation in the South-West of Western Australia* it is clear that a lot of work is needed to resolve issues of mutual interest to CALM and Nyungars."

## Liaison

During his first year, Noel will concentrate on the description and protection of Aboriginal sites, and liaison with Aboriginal groups.

He will prepare a computerised system to

enable regions to complete an inventory of known sites.

Noel will undertake work in community (particularly school) education and liaison and he will also participate in a project aimed at recording oral history on Aboriginal culture and Dryandra.

Noel, who is a Nyungar, says that his appointment has so far been well received by the local community.

"They are generally fairly positive about

CALM. I am getting feedback that it is one of the better and more approachable government departments," he said.

## Coaching

Noel is married with two school aged children. He particularly enjoys working with youth, and has often coached kids.

Noel can be contacted on (098) 811 444 or by writing to the Aboriginal liaison officer, Department of Conservation and Land Management, PO Box 100, Narrogin WA 6312.

# Tree planting ads on the air

CALM has taken to the airwaves to plant the idea of planting trees on farms.

Television commercials are being used for the first time to help boost the Department's hardwood sharefarming scheme in the Albany region.

The 30 second commercial prepared by CALM's Albany office went to air on GWN for a two week trial run last month.

The region has a target of 1 000 hectares of new plantings by the end of July.

Under the scheme, fast-growing Tasmanian bluegums are planted in strips, or timberbelts, with farmers and CALM sharing establishment costs and the return on the harvest.

Planting timberbelts is quite different to tree plantations - farmers can continue with their other crops and stock because timberbelts don't require large blocks of land. They provide shade and shelter and can also reverse land degradation and stream salinity.

by Caris Bailey

For example, it's estimated that if the Denmark River catchment tree planting program is implemented, the salinity level of the Denmark River will be cut by two thirds to 1 000 parts per million.

## Wood fibre

Executive Director, Syd Shea, told an Albany

seminar last month that wood fibre grown under the hardwood scheme had the potential to earn the State \$100 million in annual exports.

"Plans for Albany's hardwood plantations are closer to fruition after State Development Minister Ian Taylor and I held talks with potential investors in Japan earlier this year," Dr Shea said.

"If our current negotiations are successful, I'm confident it will result in a

wave of new investments."

Dr Shea told the Albany Port Authority seminar that CALM was using the latest technology available to help select the most productive areas to plant timberbelts.

## Scientists

"Agriculture Department scientists have developed a procedure which allows us to delineate saline soils using a geophysical electromagnetic technique.

"The productivity of plantations can also be estimated using a growth simulation model recently developed by Gary Inions of CALM.

"We can use this technology to determine profitability before the trees are even planted.

"This is a major breakthrough, both for CALM and, more importantly, for landowners to make decisions on tree planting based on economics as well as land care."

# Volunteer NEWS

## Judy's one of a rare breed

**RARE flora volunteer Judy Williams of Brookton has a keen eye for rare plants.**

Although officially a rare flora volunteer for only the past 12 months, Judy has been assisting CALM for several years, working closely with Narrogin district wildlife officer Leon Silvester.

During this time she has

discovered five new populations of rare flora consisting of Corrigin grevillea (*Grevillea scapigera*); column hakea, (*Hakea aculeata*); hill thomasia (*Thomasia montana*); York gum Nancy (*Wurmbea drummondii*); and *Nemcia*

*stipularis*. These discoveries highlight the importance of protecting remnant vegetation, especially in the Wheatbelt.

## More work

It also shows how little is known about our flora and how much more work is still to be done in this area.

Judy has been a keen

amateur botanist for many years and is compiling a flora list of the Brookton Shire.

Without people like Judy, we may never have known the whereabouts of some of our rare flora populations.

Such involvement and interest has helped to foster a better understanding of nature conservation in this Wheatbelt shire.

# Focus on Manjimup district

## Crews collect karri seed



Acting overseer Ron Church separating seed capsules from karri branchlets.

**MORE** than 1.2 tonnes of karri capsules have been collected by CALM crews in Manjimup from trees felled ahead of harvesting, with seed from various shrub species being collected elsewhere.

Many forest areas that need rehabilitating have understorey species replaced by seed and root stock stored in the soil. However, gravel pits and some log landings need additional help with the planting of tree seedlings, and seeding with scrub seeds.

Selected areas of jarrah forest that have been harvested are treated in the Manjimup District to enhance regrowth of the bush.

Jarrah forests readily

regenerate from root stock after harvesting and require virtually no assistance to establish new trees.

Whereas karri forests require seeding, or the planting of seedlings, jarrah forests grow from root stock and our main role is to create sufficient space for these trees to grow after logging. Many trees, both alive and dead, need to be removed after harvesting to allow unhindered development of the regrowth.

Large areas of jarrah forest could be treated in this way. However, we can only afford to do a portion of it and areas are selected according to both the extent of treatment needed, and their potential forest quality.

Stories by Alan Lush and photos by Carolyn Thomson



Three of Manjimup's four overseers (left to right) Allan Miles, Jock Marshall, and Peter Rado. Daryl Deadman is absent.

## Bush experience is changing

MANJIMUP'S four overseers have 99 years of experience be-

tween them, without a lost time accident, with a strong following brigade of forest workers who have also been around for a while.

On the other hand, apart from its senior forester, the next most experienced field officer in the District is only 33 years of age, and less than 25 per cent of the field staff have more than ten years work experience.

Our unique challenge

is to harness our AWU experience into our planning processes.

Consultation takes place regularly.

However, our real challenge is to have our work force become more outspoken, and to use their initiative more readily, with the appropriate liaison.

Good experience comes hand in hand with long exposure to traditional management and changing habits is a difficult task.

## Karri regeneration burns

**REGENERATION** of karri areas after harvesting requires a unique burn that requires special skill to set up and control.

The logistics of setting up and carrying out a regeneration burn in karri resembles a military battle being waged on a hot summer's day, with lighting crews mounting the offensive.

Defending crews are poised at strategic locations and are deployed to repel breaches in the fire line as and when they occur. If all goes well, the battle plan flows as predicted. If not, strategies are varied to repel breaches and consolidate

positions throughout the day.

Some regeneration burns can be quite spectacular, with whirly-whirlies moving small logs and breaking small trees, and crackles and banging accompanied by intense heat and smoke. This may be capped by a massive thundercloud. On some occasions, rainfall is induced down wind from such a burn from clouds formed as a result of the burn.

A recent article in the *West Australian* newspaper (Monday, February 3) in its "Earth 2000" insert described the energy released in a wild fire in the following terms:

"In just 10 minutes, a

very hot Australian bushfire can produce as much heat energy as a medium size atomic bomb exploding."

"The combination of hot, dry conditions, strong winds and a build up of fuel on the forest floor erupts with awesome power."

Regeneration burns are thoroughly planned and fully controlled and, whilst they don't quite reach the intensity of an extreme wild-fire, well and truly exceed the intensity of the fire that can be managed if it was travelling as a head fire. A lighting strategy is designed to have the fire burning inwards from all edges so that it controls itself.



Forest worker Johnny Pearce lighting slash at Beavis 4 karri regeneration burn



Forest worker Peter Culley, engaged in jarrah stand improvement.

## CALM Classified

**THIS** new service, previewed in last month's CALM NEWS, is designed to utilise departmental equipment that is either permanently or temporarily surplus to an individual district's, region's or branch's requirements.

The column is divided into sections dealing with 'surplus equipment', 'wanted', 'swap', or 'for hire'. If you have any equipment or requirement that you wish to advertise through this new service, please send or fax type-written details to:

The Editor, CALM NEWS, Corporate Relations Division

### For Hire

Lewis saw with experienced operators. \$30.00/h plus wages and plant. Contact Alan Hordacre, Collie 341 988.

### For Sale

Reliable and efficient COMPAQ LTE 286 notebook PC with carry bag, charger unit, 20Mb hard disk, 2 extra Mb RAM, MS Word 5 (with all manuals) and CALM ADMIN system installed. \$1 500. Contact Frank McKinnell, Crawley 386 8811.

### Surplus Equipment

1 off 3-point linkage water pump. Output 81 000 L/h. Contact T Kenneally, Collie 341 988.

1 off Massey Ferguson Tractor (55kW). Available until 31 May 1992. Contact Jim Raper, Collie 341 988.

1 photocopier for sale \$300. Contact Hugh Clift, Perth 405 5132..

1 off Baby Giant Plough. Contact Alan Hordacre, Collie 341 988.

1 off 3-point linkage fertiliser spreader. Contact Jim Raper, Collie 341 988.

1 off 3-point linkage slasher. Contact Jim Raper, Collie 341 988.

### Swap

New photocopier for one that will copy both sides of the paper automatically.

Contact B. Buchanan, Collie 341 988.

Atari PC, as new condition, for an NEC PC with numeric keypad (101 keyboard). Contact V. Cleggett, Collie 341 988.

### Wanted

Refrigerated air-conditioners to suit office building. Contact P. Moore, Collie 341 988.

Inkjet printer. Contact V. Cleggett, Collie 341 988.

4x4 motorbike with boomspray needed for winter 1992. Contact M. Nilsson, Collie 341 988.

Fridge. Contact Gary Brown, Collie 341 988.

## Bushfire suppression

**THE** current fire season was unusual, according to Manjimup district manager Alan Lush.

Alan said that by the end of February, Manjimup District had already exceeded the number of fires that were attended to in the last fire season.

"Although 22 fires may not be many by some districts' standards, most fires in the district have the potential to be serious because of the heavier fuel loadings throughout southern forests," he said.

A wildfire takes people away from their

routine work and can obviously cause serious damage.

### Lightning

Lightning throughout January caused 11 fires in the district in only three days.

Over 70 per cent of Manjimup's fires to date have been caused by lightning and the district's personnel and machines have already been sent to Collie, Kirup, Nannup, Pemberton and Walpole to assist with their fire suppression.



Forest worker Frank Fardella 'mopping up' a hollow butt jarrah at Beavis 4 buffer burn.

# Workshop for the Herbarium volunteers

**VOLUNTEER** co-ordinator **Kevin Kenneally** welcomed 17 volunteers to a workshop held last month in the Herbarium.

Jan Gathe gave a short talk on her role as a consultant botanist employed to database the reference herbarium, with assistance from Francine Howel and a team of volunteers.

Because the Herbarium manages the State flora collection, there is a great demand placed on it by CALM, other government departments, and the community in general.

To meet the need for native plant identification the Herbarium has a reference collection which is available to CALM staff members and the public.

Herbarium volunteers play a crucial role in helping to maintain both the content and accuracy of the reference collection.

Their work involves helping Jan to match reference herbarium specimens with vouchers in the State flora collection.

All specimens in the State collection are being databased so that each has a unique bar code number. Jan ensures that each

by Neville Marchant

reference herbarium specimen has the correct bar code number, so that any name changes made on the voucher specimen in the main collection can be easily applied to its duplicate in the reference herbarium.

The data processing is being done by Meriel Falconer and some 3 000 specimens have so far been processed.

The next speaker was David Coates, the program leader of the flora conservation program, which now includes the former plant diseases program.

## Research

David pointed out that most of his research covers rare and threatened flora and he is involved in rare flora surveys.

Public education about rare and threatened flora can be of great benefit, and enthusiastic volunteers can help speed the collection of data during rare flora surveys.

If CALM is to meet the challenge of managing the vast conservation estate of such a large State as Western Australia, while at the same time raising

public awareness, it will need all the support and help it can get from the community.

The volunteers were then taken on a tour of the Herbarium laboratory, where Vicki Hamley and Steve Carstairs demonstrated the technique of allozyme electrophoresis used for investigating genetic variation within and between plant populations and between taxa.

## Database

The final question and answer session was held in the reference herbarium and Alex Chapman was invited to attend and respond to questions about the structure and operation of the WAHerb database.

By volunteering their time and expertise, herbarium volunteers play a significant part in conserving the State's wildlife for future generations.

Here is an example of positive cooperation and interaction between members of the public and the government one in which the public is directly involved in work that helps promote an awareness of the need to protect and manage the conservation estate for the good of all.



Flora Conservation Program leader David Coates and volunteers look over the shoulder of laboratory manager Vicki Hamley as she demonstrates one of the processes for investigating genetic variation between plants. Photo by David Gough

# 'Rocks' head for Japan

by Ron Shepherd

A COUPLE of stromatolite rocks from Hamelin Pool Marine Nature Reserve are taking a flight to Japan. They are destined for the Kanagana Museum of Natural History, just outside Tokyo.

This new Museum is to detail the "life history of Planet Earth", in which stromatolite growers (tiny micro-organisms) have played a large part. The large complex will open next year, and the stromatolites provided

under CALM permit will be a primary exhibit.

In the near future discussions will be held in regard to obtaining a living stromatolite from Hamelin Pool to be a focal point at the Museum.

Dr Malcolm Walter recently visited Shark Bay to collect the stromatolite rocks on behalf of the Museum.

Dr Walter was one of the principal scientists in

the Baas Becking Laboratories which conducted extensive research in Hamelin Pool during the 1970s and early 1980s.

Dr Walter's visit to the Bay coincided with that of a freelance journalist, Ms Michiko Suzuki, interested in the micro-organism's ability to use mucus to trap sediment and form stromatolites.

Ms Suzuki has used the stromatolite story in promotional brochures for 'Selbex', Japan's best-

selling stomach ulcer medicine! How's that for lateral thinking?

## Class act

AUTUMN classes organised by the University of Western Australia Extension Service and run by CALM staff are proving to be popular. These courses provide an opportunity for the public to learn about programs and areas that CALM staff are involved in.

Following the success of the Shark Bay Heritage course last year and an article in the summer edition of *LANDSCOPE*, the Autumn 1992 course was fully booked within the first two weeks of being advertised.

The level of interest has resulted in District Manager Ron Shepherd being asked to run a second course in June.

# Looking for birds

CALM, WWF and the SA Department of Environment and Planning have initiated a new project aimed at tracking down the elusive Nullarbor quail-thrush, a mysterious bird and a species which even ornithologists know little about.

The Royal Australian Ornithologists Union (RAOU) classified it "indeterminate" in a recent review of the status of Australian birds.

Although the bird was believed to be threatened in some way, there was insufficient information to know whether it was rare, vulnerable or endangered.

The goal of WWF's study is to clarify the status of the bird, and to determine what further research or management action is appropriate.

A review of literature, unpublished records and museum specimens turned up 69 locality records.

Of these, 43 are in Western Australia and 26 in South Australia, all within the boundary of the Nullarbor region.

During the course of the project, we will visit all these areas to determine whether the birds are still present and to find out as much as we can about the habitat where the birds occur.

This is not as easy as it sounds. Nullarbor quail-thrushes are difficult to detect. They live on the ground in the treeless parts of the Nullarbor, usually in open bluebush

shrubland, or occasionally in grassland with scattered acacia shrubs, which they need for shelter. They are quiet and shy, often hiding behind or under shrubs.

They rarely fly, preferring to walk or run away from intruders in their territory, and have even been known to hide down rabbit burrows.

To help track down these mysterious birds, we employed a consultant for the project, Mr Lynn Pedler, who is an experienced and skilful South Australian field ornithologist.

During the first field trip we searched the western Nullarbor and found 16 Nullarbor quail-thrushes in nine different locations.

At a further site Lynn found quail-thrush feathers in the lining of a sapphire thornbill nest, which suggests that quail-thrushes are in this area also.

We were pleased with these results because the birds were very quiet during the time of the survey (breeding had finished early) and the windy weather made it even more difficult to detect them.

For the final field trip of the project, Lynn will drive from Adelaide and start searching from the eastern end of the plain, working toward the west to complete coverage of the Nullarbor.

At this stage the major threats to the quail-thrush are still uncertain. It seems to have disappeared from

some small areas on the western margin of its range, but still occurs in some areas which have been grazed by domestic stock and rabbits for many years.

As it spends almost all its time on the ground, it is probably highly susceptible to predation by foxes and cats which are common on the Nullarbor.

# All fired up

by Alan Grosse

THE West Kimberley district office has introduced the supply of firewood at Windjana Gorge National Park.

Early last year it was decided to purchase mill ends from down south and freight them to Windjana.

Funds were secured through Finance Branch under the incentive to increase revenue program.

The project has turned out to be a major success, with a good response from the public.

The mill ends are transported in six metre lengths in a special container, with a side-drop to facilitate in-field off-loading, supplied by Stateships.

The rangers have been supplied with rollers and a cut-off circular saw and cut wood supplies on a needs basis.

Signs in the park alert visitors to the fact that no bush timber is to be burnt in the fire rings supplied.

At the same time facilities have been upgraded and generator and non-generator campers have been segregated.

Additional revenue from the firewood is one of the reasons that returns for Windjana Gorge have jumped by 60 per cent in real terms in the last financial year.

I attribute this growth to the return of "good old service" and providing people with what they expect in a Kimberley camping experience.

If ground fires can be managed without inflicting damage to the local environment, then they are a must for a true Australian camping experience.

Thanks must go to park rangers Dave Milne and Jeff Passmore for their dedication and support in developing the efficient supply of firewood at Windjana Gorge.



CALM principal research scientist Kevin Kenneally digs in with (from left) Melissa Cawley from Floreat Park, Honor Venning and Dorothy Perret from the Wildflower Society and Robert Sydenham from Floreat.

# Native garden for children's hospital

**VOLUNTEERS** from CALM's Herbarium recently donned gloves and picked up shovels to plant a special wildflower garden at Princess Margaret Hospital.

CALM principal research scientist Kevin Kenneally coordinated the volunteers - many of them WA Wildflower Society members - to plant the garden in the hospital's child care centre. It will be a respite for the brothers and sisters of sick children

by Tanya Maxted

in hospital, and for children whose families are experiencing an emergency.

## Volunteers

The volunteers were joined by centre management committee members and interested parents, coordinated by the hospital's child care centre director Rae Young.

More than 200 native

plants - including various native tree species - were donated by Lullfitz Nursery for the garden.

Following the planting, rain fell for several days, and few plants were lost.

The centre's children, supervised by staff, have since nurtured the plants and watched their progress. Many of them were flowering one month later.

The official opening of the garden will be on World Environment Day - which is also Arbor Day.

# LANDSCOPE Expeditions



Executive Director's Award winner Warwick Roe (right) with research scientist Patrick Piggott.  
Photo by Tanyia Maxted

## Warwick wins award

CALM's top cadet from the Department's last intake has won the Executive Director's Award and taken up a technical officer's position in Narrogin.

Warwick Roe, 22, is working with research scientist Patrick Piggott on remnant vegetation

research projects in the Wheatbelt.

Current projects include prescribed burning at Lake Toolibin, the phenology of Wheatbelt eucalypts, and an audit of the remnant vegetation protection scheme.

Patrick did a similar audit on this scheme in 1989.

Warwick and Patrick work from the Agriculture Department in Narrogin, where office facilities are provided with no cost to CALM.

Patrick originally worked on a salmon gum woodland project that was jointly run by

CALM and the Agriculture Department.

With the knowledge gained from research, he and Warwick are able to advise farmers about remnant vegetation on their land. This knowledge is also used in the management of nature reserves.

## Chris misses coup

DURING February I had the privilege to represent Western Australia at the Fourth World Congress on National Parks and Protected Areas.

The Congress was held in the rather exotic venue of Caracas, Venezuela. John Watson, South Coast Regional Manager, also attended (partly self-funded and partly with funding assistance from UNESCO).

The congresses are held only once every ten years, so for both of us this was a special occasion. The third congress, which was held in Bali in 1982, was attended by "only" 400 people (including Tony Start, the then northern Superintendent for the National Parks Authority).

This congress was attended by 1500 or so representatives from around the world, including about 40 Australians. Obviously national parks and protected areas are of escalating interest.

Unfortunately the atmosphere at the congress was, I think, affected by the attempted coup in Venezuela during the previous week. The coup occurred while I was flying between Sydney and Los Angeles; my first news of it was through the American Airlines ticket agent when I went to confirm my flights on from LA. Needless to say I bought the newspaper and went straight to the CNN News to see what was going on. By that stage it appeared to be virtually all over and it was "business as usual".

I did not see the evidently graphic footage

by  
Chris Haynes

sent around the world by CNN, of tanks crashing into the gates of the Defence Department and the bullets flying around the Presidential Palace.

### Bullet holes

I did see the aftermath of this, however, when I was walking in downtown Caracas a couple of weeks later. Even that I found relatively scary. The security for the conference was very high. Members of the National Guard and Army were present everywhere, complete with machine guns.

I can't tell whether this would have been normally afforded or not.

During the opening and closing ceremonies, when

President Perez was present, there was also a very strong contingent of the Presidential Guard.

As to the congress itself, I found it very worthwhile. Apart from the many opportunities one has to meet people from all over the world, there were five whole days and many evening sessions spent on formal and informal workshops at which particular topics were discussed. For me there were a number of important messages from the Congress itself and these are issues in which we share.

The trends for protected areas are clear - more visitors, more general interest in conservation management from the general public, static or declining resources in the public sector, so that all agencies are having to

## Back to bush

PERTH families can sample bush tucker, go horseback riding or wade their way through a swamp safari...all on the city's doorstep.

The Go Bush program is held every spring and autumn in the hills forest around Mundaring and Kalamunda.

Children and adults can sample the bush tucker of the Mundaring area, or take a crash course in bushwalking made easy led by Bibbulmun Track veteran, Drew Griffiths.

For those who like a spot of adventure, there's a spotlight search in the dark for animals that are rarely seen.

The bush activities

switch to Yanchep National Park in the school holidays, from 13 - 25 April.

There'll be guided tours through caves normally closed to the public and a sometimes waist-deep trek through the swamp to take a closer look at nature conservation.

Bushwalking will not only give those taking part an opportunity to stretch their legs, but should be an exciting, informative and interesting way to spend the holidays.

For more information, please call the Go Bush Registrar on 295 1955 and Yanchep's Holiday Education line on Monday to Friday, from 9am - 4pm.

work smarter with less.

The most powerful message of the Congress to me was that all constituencies have to be accommodated. This applies to all neighbours and interest groups as well as indigenous people, an issue which is receiving escalating attention throughout the world after decades of neglect.

In these areas, I believe CALM is clearly ahead of many other agencies and I feel that we can hold our head high in the world forum.

## Learning about dieback

PARKERVILLE Primary School students learnt the finer points of controlling jarrah dieback last week when they were visited by experts from the Department of Conservation and Land Management.

Year five and six students and their parents

heard CALM research scientist Dr Bryan Shearer talk about ways to control dieback disease.

Children and parents are to begin injecting fungicide into the trunks of infected trees surrounding the school.

Teacher Bill Frost said CALM officers first

noticed that some trees and wildflowers were infected by dieback when they toured the school's nature trail to help students identify plant species.

### Grant awarded

"Earlier this year the school's parents and

citizens association received a \$3 000 Gordon Reid Foundation Grant - through the Lotteries Commission - to purchase the equipment and chemicals needed to treat dieback.

"The next stage of the dieback control program will involve rehabilitation work," Mr Frost said. Phosphorous acid protects banksias from infection for at least four years after being applied, and banksias already infected by the fungi can heal themselves after treatment.

In the longer term, biological research also offers hope of turning the fungi on themselves. Genetic engineering may be able to exploit weaknesses in the make-up of the fungi in order to help control them.

Such options are, however, expensive and will take time to develop.

Story courtesy of *The Hills Gazette*.



Parkerville Primary School students participating in a project to control dieback.