

CALM NEWS



DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

COMO RESOURCE CENTRE
DEPARTMENT OF CONSERVATION
& LAND MANAGEMENT
WESTERN AUSTRALIA

September 1991



Forest ranger Mort Nilsson measures the diameter of trees felled in the Mungalup plantation (see story on page 6).

New nature reserve near Gingin

In August 1991 an important new nature reserve of 9250 ha was set aside at Boonanarring Hill, north of Gingin.

The area has long been recognised as valuable to conservation. In 1971 Norm McKenzie of the W.A. Wildlife Research Centre inspected the area whilst making a survey of the northern Swan Coastal Plain; as a result, the Department of Fisheries and Wildlife applied for the area as a nature reserve.

No action to reserve the land took place, however, but in 1976 the area was incorporated in the System Six study (of the Swan Coastal Plain and the Darling Plateau between the Moore River and the Blackwood River). It was recommended as a nature reserve in the study's final report, the System Six Red Book, in 1983.

The area is representative of the Dandaragan Plateau and its scarp, and contains a variety of soils: laterite, orange sand, grey sand and peaty winter-wet soils. Correspondingly, the flora is rich and varied.

A number of plant species that occur in the area are of special interest including pouched grevillea (*Grevillea saccata*), which is gazetted as rare, and fishbone banksia (*Banksia chamaephyton*), a Priority 5 species that was previously gazetted. Two poorly known species are also present: *Dryandra aff. polycephala* (Priority 3) and *Calytrix superba* (Priority 2). The area is the main location of the Calytrix. In addition, two species of spider-orchid are not yet named or described. The trigger-plant *Stylidium leptocalyx* and the shrub *Dryandra polycephala* are of restricted distribution and poorly represented in

conservation reserves; the latter is heavily exploited by the wildflower industry. The slender mallee *Eucalyptus decurva* and the paper-lily *Laxmannia omnifertilis* occur here well outside their normal ranges.

The dominant trees include salmon white-gum (*Eucalyptus lane-poolei*), an uncommon species of scattered occurrence. Two other dominant tree species - jarrah and pricklybark - have hybridized here. No hybrids of these species are known anywhere else.

A fairly brief fauna survey in 1986 revealed 10 species of native mammal, 54 species of bird and 20 species of reptile.

The area recently set aside as nature reserve was vacant Crown land. While it is the bulk of the area, the System Six study also proposed that some adjoining reserves be included, and also, if possible, some land be purchased to include further valuable conservation land in the proposed nature reserve. It is hoped that ultimately an area similar to that recommended in the System Six Report will be consolidated as a nature reserve.



WOODWORKS
AN ART & TECHNOLOGY
FESTIVAL
SEPTEMBER 20-28 1991

See centre for more details

Three-year tree count now completed

by Caris Bailey

The biggest forest stock take carried out in Australia has just been completed by CALM staff.

One and a half million hectares of State forest have been surveyed in a three year project, measuring 700,000 trees in the first phase of the Department's jarrah forest inventory.

Several aerial canker fungi appear to be killing the banksia and other native plants. Six fungi have so far been associated with the canker disease in WA. Infections have been identified from Eneabba to Hopetoun, including deaths in tuart, wandoo and banksia woodlands.

Staff from Inventory, Fire Protection, Land Information, and Information Services branches have worked on the inventory, with help from CALM district offices, the University of Melbourne and Curtin University of Technology.

Aerial photography directed by satellites and analysed by computers has made it possible to complete the huge job in just three years.

The flight paths of a specially equipped helicopter were fixed by a precise satellite navigation system, known as the Global Positioning System. This technology has improved the accuracy of locating aerial photographs on the ground, as well as making it possible to calculate volume statements for any area of State forest.

Altogether, 28,000 photographs were taken, providing quick and low cost estimates of timber volume in the State's jarrah, marri and wandoo forests.

These have been supported by measurements of about 80,000 trees on the ground, giving estimates of volumes of different log grades. The ground measurements have been taken in such a way that new estimates can be derived even when the standards of log use change.

The inventory now enters its second phase, the continuous updating of information to allow for the effects of timber harvest and other disturbances.

The final phase of the inventory will involve sampling other categories of land to ensure planners have access to information about all the State's forests, not just the areas available for timber harvesting.

Mr Pearce said the ban would be lifted if the disease threat subsided and the banksia recovered. Researchers from CALM are working on the problem of tackling this new threat to our precious flora, but there is concern that the excellent hygiene measures developed in response to dieback will be limited against fungi carried by wind and rain.

Mr Pearce said the ban would be lifted if the disease threat subsided and the banksia recovered. Researchers from CALM are working on the problem of tackling this new threat to our precious flora, but there is concern that the excellent hygiene measures developed in response to dieback will be limited against fungi carried by wind and rain.

Scarlet banksia picking banned

In an effort to save Western Australia's scarlet banksia, which is under threat from airborne fungi, commercial picking of the wildflower on Crown land was banned as from the first of this month.

Environment Minister Bob Pearce said the move was necessary to ensure the plant's survival.

"Scarlet banksia, which in the wild grows only in an area west of Albany to Hopetoun, is already un-

der attack from dieback. It has now fallen prey to a number of airborne plant diseases," Mr Pearce said.

Several aerial canker fungi appear to be killing the banksia and other native plants. Six fungi have so far been associated with the canker disease in WA. Infections have been identified from Eneabba to Hopetoun, including deaths in tuart, wandoo and banksia woodlands.

Scientists know very little about the cankers, but

the main fungus involved is known to occur worldwide.

"Commercial harvesting carries with it a risk of spreading dieback and other diseases and the extra pressure on the banksia is unacceptable," said Mr Pearce.

It's also essential that seed heads, which are unaffected, be retained in infected banksias to allow regeneration and this is not possible if the flowers are picked. Wildflower pick-



Without doubt, one of the major success stories in CALM has been the progress we have made in the field of recreation design and management. (I make this comment cautiously, because I don't wish to draw comparisons with all our other scientific, administrative and technical successes!)

Over the last five years, there has been a major revolution in the layout and care of recreation areas in parks and forests under CALM management. Wherever you look, access and drainage has been properly organised; eroded areas are rehabilitating; signs are clear, concise and positive; facilities are new and user-friendly; and, in most cases, attractive and interesting interpretive material has also been placed on site. A very high standard of maintenance is always noticeable.

Considering that we manage over 200 major recreation sites, and cater for more than 4.5 million visitors annually, this is a magnificent effort.

It is particularly pleasing to me that my views are shared by most visitors. Two surveys carried out last year gave the astonishing result that 99 per cent of respondents thought we were performing very satisfactorily. This is what I call positive feedback!

There are several explanations for this pleasing progress. First, I think most CALM staff are themselves orientated towards outdoors recreation and they take a personal interest in the areas and the services provided. Equally, I attribute the excellence of our recreation planning, design and management to the excellence of the training and support programs directed by Wayne Schmidt and his colleagues. Some 350 CALM staff have attended the Introductory and Advanced Recreation courses since 1987, and all staff have access to CALM's Recreation and Sign Manuals (which are so good they have been recognised internationally). In my view, Wayne and his staff have not only provided staff with the requisite skills and support, they have changed the whole culture of the Department.

We also have first class crews of men and women to build and maintain recreation sites and facilities within the parks and forests. The best-laid plans and manuals are of little use if we haven't got skilled people on the ground to implement them.

Providing recreation opportunities and interpretive material to visitors is one of our most pleasant and important tasks, and providing quality experiences and material is a tangible demonstration of the professionalism and pride of workmanship which pervades CALM.

Roger Underwood, Acting Executive Director

Executive Director's Scholarship

For four years the winners of the "Executive Director's Post Graduate Scholarship" have been involved in some great achievements, and this year, the Scholarship could give you the opportunity to be involved in some of the great achievements of the future.

The "Executive Director's Post Graduate Scholarship" was set up in 1986 to give CALM staff the opportunity to study and increase their own personal qualifications.

Since many CALM staff did not have the opportunity to complete post-graduate or under-graduate degrees, these scholarship awards were seen as a means of providing that opportunity.

Winners of the Scholarship have the opportunity to add to their own qualifications and, thereby, add to their career choices. The Department will also benefit from this acquisition of new skills.

As Post-graduate qualifications become a standard requirement for research scientists, the Department feels that people with such qualifications would be of great value to the staff in the Specialist Branches and Operations.

Scholarship winners may also receive permission to remain as full time or part time employees on half pay, when undertaking study, if their time commitment is more than 15%.

The Executive Direc-

tor can also grant full time study leave with pay to people undertaking Post-graduate degrees at Australian or overseas tertiary institutions, study tours involving investigations or a combination of both.

CALM employees interested in applying for the Executive Director's Scholarship should submit a fully detailed proposal on the intended study programme, including any related costs, and an outline of the units within the award.

The applications for the Scholarship must reach the relevant Directors by the 27th of September. The Directors will then forward their recommendations on to the Executive Director by October 18th.

accurately from one end of the State to the other. Those divisions or branches that have close dealings with other Government departments would be able to send faxes or other information to another department, literally at the push of a button.

Bevan is already talking to Telecom about using some of the new ISDN systems for linking the far-flung CALM offices. CALM is different from many other Government

departments because it's offices are spread all across the State.

All this may seem a little futuristic, but it's been possible to send and receive information electronically for many years. The difference, now, is that the costs of setting up such a system are much less than they were just a few years ago and that today's PCs have more processing power and memory capacity than the mainframes of the early 1980s.

Bevan Kerr came to CALM from the Department of State Services, and brings with him many years of valuable computer expertise.

Currently, he is touring the regions talking to division, branch, and regional managers to familiarise himself with CALM's computer systems, the type of work being done, and future requirements from users.

While users will be encouraged to specify the software they require to do the job, Bevan sees the branch as acting in an advisory capacity to help users select the appropriate software from a preferred range and providing support for that range. "It would be impractical to expect us to be able to support every major software package available. But if users are given a reasonably wide range of preferred software from which to choose, they should be able to find something that will do the job they want while getting the expected level of support," he said.

Bevan's aim is for computer users in CALM to have a combination of stand-alone autonomy with the inter-connectedness of a fully integrated system. With such a system, users would be able to work on their own 'stand-alone' machine while having the ability to send or receive data, information, graphics, faxes, and other electronic mail quickly and



Bevan Kerr

FOR...LETTERS TO THE EDITOR...LETTERS TO THE EDITOR

To: The Editor

Dear Sir/Madam

I wish to express my sincere gratitude to CALM officer Paul Udinga for his assistance during a four-day outdoor education camp, which was recently conducted at the Nanga Mill site near Dwellingup.

After introducing himself, officer Udinga assisted in running various activities and provided instruction to the students on various aspects of the environment. He also took time to ensure we were supplied with adequate fire wood.

For many of the students this was the first experience of camping in an unfamiliar setting and the actions of your officer did a great deal to instill respect for CALM personnel and their jobs.

The time that officer Udinga gave was of enormous educational value and exceeded all expectations for a person who tended to the requirements of other campers and sightseers in the area as well.

On behalf of myself, my fellow staff and my students, I would like to extend my appreciation for a job well done.

JOHN SHERRIFFS
Outdoor Education
Teacher
Hampton Senior High
School,

To: Executive Director,
CALM

Dear Sir

I wish to record my delight with the progress your department has made in the Windjana Gorge and Tunnel Creek areas: there must be few localities now with a greater combination of history and beauty. The information boards are factual and sensitive, and they would appear to be the best way of getting the story across.

Please record my appreciation of the assistance

enjoyed by my party of nineteen from your rangers Dave Milne and Geoff Passmore, and officer Alan Grosse. All members of my party expressed delight with the courtesy and attention of your officers and the facilities.

With congratulations all round, and best wishes,

ALEX JONES
Manjimup

To: The Editor

Dear Sir

Considerable favourable public comment is being noted by members of the WA National Parks & Reserves Association, regarding CALM's recent publication "Wildflower Country" (CALM NEWS, July 1991).

We think that it has been well put together. It must be especially pleasing to the concept originators to eventually achieve an attractive product after obviously putting a lot of hard work into coordinating the expertise of many people, all with a coming wildflower-season deadline in mind.

Well done, to all those involved.

GRAEME RUNDLE
President
WA National Parks &
Reserves Association

To: Executive Director,
CALM

Dear Dr Shea

From My Desk - CALM
and Aboriginal interests

As you are aware, I am an avid reader of the editorial

column of this staff newspaper.

Following the recent CALM/NPNCA/LFC public seminar regarding Aboriginal involvement in CALM's area of interest, I went back to CALM NEWS of a year ago (July-August 1990) and re-read your words in 'From My Desk' - and had greater appreciation of what you were saying.

Your views were worth reading again, and the concluding paragraphs, especially, were well put and thought provoking. The difficult tasks being faced by CALM are appreciated.

GRAEME RUNDLE
Sorrento

To: Dr Barry Wilson,
Director of Wildlife
Conservation

Dear Sir

This is to thank you for the help you and your staff gave to the Natural History Unit last year when we were filming the documentary called *The Kimberley - land of the Wandjina*.

The program is now finished, and has been scheduled to go to air on the ABC network on Sunday September 15 at 7.30 pm. *The Kimberley - land of the Wandjina* will be the first in a new series of one hour natural history and environmental films to be screened under the series title *A Most Remarkable Planet*.

The assistance and good will that was shown towards us all made for a much easier task when we were on location, and it is help such as this that makes

it possible to make these films.

Once again, many thanks, and I hope that you will enjoy the film and the rest of the series when it is transmitted.

JEREMY HOGARTH
Producer - Natural History
Unit, ABC TV

To: The Editor

Dear Sir/Madam

Just a short note to compliment your friendly and helpful staff who were at the Forrestfield Forum on Saturday, 20 July.

My two girls thoroughly enjoyed themselves feeding the kangaroo and making gumnut and playdough animals.

In particular, there was a very friendly and helpful young lady who assisted my girls with their crafts, whilst being very informative.

It is refreshing to see a public servant as pleasant and helpful as she. My girls continued to talk of the fun they had that day, which I can only attribute to the kindness and assistance shown to them by "Carol".

I would appreciate it if you would pass on my thanks to her.

I also enjoyed the display and the animals and am very pleased I purchased your book "Beating about the Bush".

Thank you again for your consideration.

(Mrs) Leanne Fitzsimmons
18 Direction Place
Morley WA 6062.

Send your letters to:
CALM News
PO Box 104
Como WA 6152

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Managing Editor: Ron Kawallak

Editor: David Gough

Contributing Editors: Verna Costello, Tanyia Maxted, Carolyn Thomson
Design and Layout: David Gough

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(cnr) Mounts Bay Road & Hackett Drive, CRAWLEY, Western Australia 6009
Telephone: (09) 389 8644 Facsimile: (09) 389 8296

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Jack Kinnear, left, and Richard Harris (Photograph courtesy of the West Australian)

CALM scientist wins award

Jack Kinnear, a principal research scientist at CALM's Woodvale wildlife research station, has won the inaugural Alex Harris Medal, which is awarded for excellence in science and environmental writing.

The award honours the late Alex Harris, who was the science and environment writer for the *West Australian*. It was presented by her widower, Richard Harris, and son,

Leon, at a special ceremony held in the CSIRO laboratories.

Jack received the award for his article entitled *Trappings of Success*, which appeared in *LANDSCOPE* last year. The editor of the *West Australian*, Paul Murray, said Dr Kinnear had won the award based on the attributes Mrs Harris had displayed in her own work.

"This medal is important because it honours a

truly remarkable woman who set real standards with her journalism," Mr Murray said.

The Australian and New Zealand Association for the Advancement of Science, the CSIRO, and the *West Australian* launched the award soon after Mrs Harris's death.

The Alex Harris Medal is open to any writer of a major news or feature report on a WA topic published or broadcast in WA.

New book published by CALM Director

CALM's Director of Parks, Chris Haynes, has recently published a book on Australia's northern lowlands.

Monsoonal Australia, edited by Haynes, Ridpath and Williams, describes an environment where a monsoonal climate dominates every aspect of life, and is the theme that links landscape, ecology and man.

The book is the first serious attempt ever made to provide an ecological perspective of the coastal lowlands of monsoonal

Australia. In particular it emphasises the features which distinguish monsoonal lowlands and their biota from those of temperate regions. It also throws new light on important issues affecting management, such as the impact of feral animals, the use of fire, and the need for conservation. The importance of this is highlighted by the now rapid development of uranium mining and tourism within the region.

The thirteen chapters cover the history of the

landscape, the climate, the vegetation, the vertebrate animals, Aboriginal association with the land, conservation, and the future. Another CALM officer, Gordon Friend, was a co-author of the chapter on reptiles and amphibians.

Chris says he is delighted with the book. "For me it is quite a new experience," he said. "It had its origins in a seminar we held at CSIRO in Darwin in 1980. It seemed to us then that we had a unique opportunity to put together the work of scientists who

Dwellingup gets big timber boost

by Nadeen Andrijich

Two new timber mills and thirty new jobs will be a big boost to the town of Dwellingup.

The two new owners, Colli and Sons and Coli Timber Products, have bought the former Bunnings mill and the old Forest Department mill respectively.

Environment Minister Bob Pearce said both companies are committed to improved use of jarrah sawlogs and to increasing value-adding.

"In line with the State Government's timber strategy, a much higher proportion of the superb jarrah logs from the Dwellingup region will be converted to high quality products," he said.

Coli Timber Products plans to use the Bunnings building and some of the existing plant, and to renovate the mill to its own cutting requirements.

Spokesperson Warren Coli said the company had originally planned to develop an operation at Byford before buying the mill in Dwellingup, but they will now develop a retail store there.

Mr Coli also said his company would require about fifteen workers, and that it would make sense to use the skills of the former Bunnings timber workers

from Dwellingup area.

Managing Director from Colli and Sons, Cesare Colli said that his company had already organised shed extensions, and brought new machinery for the old Forest Department mill. The company plans to spend over \$1 million on the development of the mill.

As well as the normal mill operation, the company also hopes to provide

access for tourists to the mill and provide craftwood for local artisans.

Dwellingup Progress Association president Tom Cornock sees the mills' development as a bonus for the town, and hopes that they will use the skills of the former workers and provide new job opportunities for the unemployed youth of the town. It is hoped the mills will begin operations in November.

The Dwellingup Progress Association has also been involved in discussions with CALM, the Murray Shire and the South West Development Authority on a proposal for a caravan park in Dwellingup.

A prospectus has been written and advertisements have been placed for expressions of interest from people wishing to develop the park.

It's safe to look down, now

by John Malone

IMPROVEMENTS in public safety at viewing lookouts in Karijini National Park (formerly Hamersley Range National Park) have been made with the installation of handrails and platforms at various locations within the park.

With the funds available, viewing platforms have been provided at Knox and Joffre Gorges, Circular Pool and Three Way Junction lookouts, enabling visitors a safer, closer view of the magnificent scenery.

The layout and design of each handrail platform became a well-planned team effort by Karratha office, park rangers and Engineering Branch staff.

Work began last November with an on-site survey, combined with a thorough examination of the flaking, laminated cliff face at each designated lookout.

With all design work, budget and fund allocation approved, the tight production, transport and site installation program was evaluated and closely monitored throughout.

Works were successfully completed by mid April. The project was entirely successful, being completed inside budget allocation, and within the on-site time span allowed.

During the installation work, an awkward transport problem at Knox Gorge was solved innovatively. Automotive hubs, rims and tyres were fitted to the bulky 350 kg

Knox platform, converting it to an oversize garden trolley. This, in turn, was connected by a cable to the ranger's vehicle winch.

The platform was then lowered slowly and safely down the 100 metres of rugged, sloping terrain from the unloading area to the final site location.

After much pushing, pulling and shoving, the platform was located in its designated position on the edge of the 80 metre deep cliff face.

Finally, rocks topped with concrete were added to the rear section to meet the design ballast requirements for the cantilevered platform.

Platforms at the three other locations had been fabricated in bolt-together sections, and were a lot simpler to manhandle into position, before bolting down.

Anchors were used to hold down the structures and to offset damage to the cliff edges, caused by the thermal expansion of the structures, due to the wide-ranging temperatures of the Pilbara.

With at least two more lookouts still to be upgraded, it is hoped additional funds can be made available in the coming financial year.



Sections of the safety railing being fitted on-site at Joffre Gorge in the Karijini National Park.

NPNCA Chairman retires

Norman Halse, head of the National Parks and Nature Conservation Authority since 1985, has retired.

He began his career in 1951 as a Research Officer with the Department of Agriculture and retired in January 1990.

In tribute to Mr Halse, Environment Minister Bob Pearce said, "The State's conservation estate belongs to the people of Western Australia and the NPNCA has emphasised

this under Mr Halse's leadership. He has played an important role in shaping the authority from just an idea to its effective operation today."

Mr Halse also has a personal interest in nature conservation and the conservative use of resources and is a past president of the Conservation Council of WA.

The new chairman of the NPNCA is Prof Arthur McComb, professor of environmental science at Murdoch University, and

NPNCA's deputy chairman since 1988. Environmental consultant Dr Elizabeth Mattiske becomes Deputy Chairwoman.

Two new members have also been appointed. They are Mr Malcolm Trudgen, a consultant botanist, and Mr Stephen Wilke, catchment manager for the WA Water Authority.

The NPNCA is the vesting authority for the State's national parks, nature reserves, marine parks and marine reserves.



Chris Haynes, left, shows some of his colleagues his new book, *Monsoonal Australia*.

Photo - Verna Costello

WOODWORKS, an art and technology festival with a theme of wood, will be held later this month at Curtin University. The festival has been sponsored by the Department of Conservation and Land Management (CALM) and organised by Curtin University. It is the second

Man" will visit the festival to give advice on survival in the bush - what to eat and what not to eat - and chefs from the Perth Sheraton Hotel will demonstrate the fine art of preparing gourmet bush tucker.

Another main event of WOODWORKS will be a technical

of the future including Valwood and Scrimber, and wood in the marketplace.

CALM's General Manager Roger Underwood is coordinating the symposium and is excited about its possible outcomes.

"The idea is to explore current

WOODWORKS

an art and technology festival

in a series of four biennial festivals conceived by Curtin and staged in cooperation with a Government department.

The premier of local playwright Tony Nicholls' specially commissioned play "Out of the Wood" will open the festival, and his new play for children, entitled "Fiddlesticks", will be performed during the following week.

ABC television's "Bush Tucker

symposium organised by CALM and entitled 'Tree Growing and Timber Technologies for the 21st Century'. It will be held on Sunday 22 September at the University.

The symposium will deal with a wide range of topics including: breeding salt-resistant trees and looking at other new trees for multiple uses, regenerating southwest forests, new logging and saw milling technologies, wood products

research and development work in the fields of tree-growing and establishment, and in timber harvesting, manufacture and use, to

20 - 28
SEPTEMBER 1991

CALM on display

"There's more to forests than trees. . ." is the theme of CALM's display at the WOODWORKS art and technology festival. The display will be housed in a marquee at the south end of Henderson Court.

There will be interactive displays and information boards covering the various aspects of CALM's work - conservation, education, production management, protection, and recreation - that will demonstrate the importance of a balanced and caring approach to forests and

forest management.

During the weekend, there will be demonstrations of sign-making and construction of picnic area furniture, a full-scale model of a park information shelter, and free billy tea and damper. CALM career information will also be available for students and would-be students of Curtin University.

On Tuesday to Thursday mornings there will be children's activities including bark rubbing, drawing, and colouring, as well as the opportunity to see some of the animals of our forests at close quarters.

Out of the Wood - a play for our time



One of the major attractions at WOODWORKS is *Out of the Wood*, a new play by Tony Nicholls which was specially commissioned for the festival by CALM and Curtin University.

Directed by Barbara Dennis and designed by Leaf Watson, *Out of the Wood* is concerned with the relationship between people and the land they inhabit. It poses the question: what is the

proper way for a species with a lifespan of a mere seventy years to relate to a world with a lifespan of millions of years and to trees which may take centuries to mature? And what is our responsibility to the past and to the future?

Set in Western Australia, *Out of the Wood* develops its themes through two main narratives. One deals with the group settlement scheme of the 1920s and sketches the story of one young migrant couple who arrive full

of hopes and dreams only to see them shattered by government mismanagement, their own incapacity, and the intractability of the forest land they are given to farm. The second story is set in 1991 and concerns a young woman unexpectedly bequeathed the power to lock up a huge, privately-owned tract of forest land or to sell it to a coal-mining consortium. When she flees to the forest in a panic of indecision she meets . . . (to find out more, see the play.)

Out of the Wood premieres on Friday September 20 and continues on September 21 and 24 to 28 at the Hayman Theatre, on Curtin University campus. The performances commence at 8.00 pm each evening. Bookings can be made by telephoning (09) 351 2383 between 9.00 am and 3.30 pm weekdays. Tickets are \$8.00 (full) and \$6.00 (concession).



point the way for research and development into the next century," said Mr Underwood.

"I am hopeful that the published proceedings will be of interest not only to farmers and foresters across Australia, but also to people in developing countries looking to

establish a sustainable tree-growing and timber industry," he said.

Other attractions of WOODWORKS include; a *Son et Lumiere* demonstration by Curtin's Communication and Cultural

Studies Department; a performed anthology with local actors and compered by Tom Shapcott; an exhibition of fine furniture by Helmut Leuckenhausen; an exhibition of writing and woodwork art; an exhibition of recycled wood products; a tour of wooden buildings; and musical events.

WOODWORKS promises to be a fine festival of all that is best in wood.



ACTIVITY	Date	Time	Location	Persons/Departments directing, exhibiting, presiding, participating
Opening night play "Out of the Wood"	20/9 Friday	8pm	Hayman Theatre	Opening address by the Minister for the Environment, The Hon. R. J. Pearce
Son et Lumiere display	20/9 Friday 23/9 to 28/9	7.20pm 7.30pm	Hayman Theatre	Department of Communication and Cultural Studies
Open Days	21/9 & 22/9	9am to 5pm	All areas on campus	Organiser: Dorothy Albrecht
CALM display "There's more to forests than trees..."	21/9, 22/9 & 24/9 to 26/9	9am to 5pm (weekend) 10am to 12 (weekdays)	Henderson Court	Department of Conservation and Land Management (CALM)
Symposium: "Trees & Timber - Technologies for the 21st Century"	22/9 Sunday	9am to 5pm	Hayden Williams Lecture Theatre	Department of Conservation and Land Management (CALM)
Poetry Readings	22/9 Sunday	8.30pm	Hayman Theatre (upstairs)	Compere: Tom Shapcott; readings by WA actors
Bus tour of wooden houses	22/9 Sunday	9am to 5pm	Metro and hills areas	Duncan Richards, Head of Architecture
Exhibition of writing and woodwork art	20/9 to 28/9	9am to 5pm	Erica Underwood Gallery (Folios for sale)	WA writers, including Elizabeth Jolley and Philip Salom
Play: "Out of the Wood"	23/9 to 28/9	8pm	Hayman Theatre	Directed by Barbara Dennis
WA Furniture exhibition	21/9 to 28/9	9am to 5pm	Architecture Building	Invited furniture makers
Helmut Luechenhausen fine furniture display	21/9 to 28/9	9am to 5pm	Erica Underwood Gallery	Helmut Luechenhausen Artist-in-residence
Jullian Bradshaw Memorial Lecture	26/9 Thursday	6pm	Art Gallery of WA	Address by Helmut Luechenhausen
Woodwind Ensemble	26/9 Thursday	6pm	Art Gallery of WA	University of WA Music Department
Re-cycled wood exhibition	21/9 to 28/9	9am to 5pm	Henderson Court	WA wood sculptors
Children's Play: "Fiddlesticks"	24/9 to 26/9	10am & 11am	Hayman Theatre (upstairs)	Director: Christine Boulton
Wooden campanile display	21/9 to 28/9	9am to 5pm	Architecture Building	Phil Evans
Bush tucker poster display	21/9 to 28/9	9am to 5pm	Henderson Court	Department of Public Health
Sandalwood display	21/9 to 28/9	9am to 5pm	Henderson Court	Department of Environmental Biology
Termite poster display	21/9 to 28/9	9am to 5pm	Henderson Court	Department of Environmental Biology
Marron poster display	21/9 to 28/9	9am to 5pm	Henderson Court	Biomedical Science
"Gourmet" bush tucker	21/9	from 1pm	Henderson Court	Sheraton Hotel
Bush Tucker Man	21/9	2pm	Henderson Court	Major Les Hiddens
Timber designers' workshop	26/9 & 27/9	9am to 5pm	Design Lab, 322 Architecture	Forest Industries Federation

Timber Design and Construction workshop



The Forest Industries Federation will hold a two-day technical workshop for architects and engineers as part of the WOODWORKS festival.

The workshop, which will be held on September 26 and 27, will provide specialist information on the design and construction of commercial and industrial timber buildings.

Speakers, experts in their fields, will

guide participants through the design and construction processes. Areas to be covered will include consideration of space, form and economy; specification of materials and workmanship; and component fabrication and construction technology.

During the first day, the workshop will focus on design, while on the second it will concentrate on structural considerations.

If there is sufficient interest, a tour of indus-

trial and commercial buildings will be undertaken on the Saturday morning, 28 September.

The cost of attending the workshop is \$100 per day, which includes meals and seminar notes. Further details can be obtained from the Forest Industries Federation at 103 Colin Street, West Perth 6005, or telephone (09) 322 2088.

Tree growing and timber use seminar

One of CALM's major contributions to the WOODWORKS Festival is the presentation of a major scientific and technical seminar entitled "Trees and Timber - Technologies for the 21st Century".

Scientists, foresters and engineers will describe the most up-to-date research in areas such as breeding salt-resistant trees, tissue culture to produce tree clones, regenerating native forests, planning tree-growing programs

farms, logging and saw-milling technologies, re-assembling wood into value products, and fine wood crafting.

The seminar will be aimed at the practical tree grower, wood user, and land manager and will also be open to members of the public with an interest in tree growing and timber utilisation.

CALM General Manager Roger Underwood's keynote speech will address the new demands being placed on our forests and timber, and look at the tech-

nologies being developed to solve the economic and environmental problems inherent in those demands.

In keeping with the festival spirit of the WOODWORKS, the seminar will feature a series of humorous but serious playlets - written by local playwright Tony Nicholls - that are designed to entertain and inspire the delegates.

The seminar will be held on Sunday September 22 in the Hayden Williams Lecture Theatre, Curtin University, starting at 9 am and ending at

about 5 pm.

At the completion of the seminar there will be a small ceremony at which a commemorative grove of laurel trees will be planted on the Curtin University campus.

There will be no fee for the seminar, but those interested in attending are asked to contact Kerry Carmichael at CALM Crawley on (09) 386 8811, by Wednesday 16 September 1991.



A matter of course

by Carolyn Thomson



CALM workers erecting the fence around a remnant rainforest patch at Mitchell Plateau

Fence protects rainforest patch

In early August, CALM personnel erected the first fence around a small patch of remnant rainforest at the Mitchell Plateau.

The fence was erected as part of the National Rainforest Conservation Program with part funding from the Save the Bush scheme.

There are many small rainforest patches in the Kimberley that support a diverse assemblage of quite unique plants and animals. But, like many other fragile areas, they are under threat. One of the major threats to these particular areas is their destruction

by stock, notably cattle and donkeys. Cattle intrude into rainforest in search of food and, in addition to the damage from grazing, trampling by these animals damages existing plants, prevents seedlings from growing, compacts the soil, causes erosion and disturbs native animals.

Construction of the fence at the Mitchell Plateau was an arduous task. The team - Allan Thomson, Mark Pittavino, Grant Lamb, Dave Grosse, Estelle Leyland and Gordon Graham - had to carry fencing materials up and down steep slopes, clamber over rocks, and

drive fence pickets into the hard laterite soil.

Approval for the project was received from the Department of Land Administration (DOLA) and there was also consultation with local Aboriginal communities that have an interest in the area.

Apart from protecting a patch of rainforest, the sites will become important for research and monitoring. They will be compared with similar areas that have not been fenced so the effects of cattle on the rainforests can be monitored and the rehabilitation of the forests can be documented.

When Jean Collins, who organises University of Western Australia extension courses, discovered CALM she found a rich vein of talent.

The courses Jean has organised with CALM have included a natural history course at Shark Bay with district manager Ron Shepherd, frogs of the Ludlow tuart forest with researcher Grant Wardell-Johnson and a marine discovery weekend at the Shoalwater Bay Marine Park with Rae Burrows, Terry Goodlich and John Edwards.

However, 'A wild weekend with CALM' was the first University Extension course run by CALM staff and remains one of the most popular, having

now been held 10 times.

The course, which is usually taken by researchers Per Christensen and Graeme Liddelow, explains the ecology of the animals, including endangered numbats, tammars, woylies, possums and chuditch, of the Perup forest east of Manjimup.

People love the opportunity to go spotlighting each night and then look for the signs of where the animals have been the next day. A brushtail possum nests in the stove at the centre and bandicoots live underneath the house.

"I think that part of its appeal is because the title worked so well - it makes it sound like a fun learning experience," said Jean, "people rave about the wild

weekend and several enjoyed it so much that they have done it a second time."

It was so successful that 'Wildflowers of the Perup' and 'Birds of the Perup forest' are now also being offered.

The course lecture fees and accommodation charges are put back in to the centre at Perup to help the Department maintain it, while the fees for the Shark Bay course go towards dolphin research at Monkey Mia.

Participation in such courses also helps CALM to explain innovative research and management of complex ecosystems to interested people.

Extension courses are run four times each year and Jean needs to dream up about 100 courses over that period. Fortunately, her bubbly personality and vivid imagination help her to generate ideas.

"I look for courses that are different to the usual tourist offerings," she said, "and working with departments such as CALM gives the public access to otherwise inaccessible areas and experiences."

Some ideas come from newspaper articles or just talking to people. At other times, Jean will plan a trip to a location such as Exmouth and call in to all

Left: Dr Per Christensen releases a brush-tail possum during a 'Wild Weekend at Perup'. Top: Jean Collins. Photos - Carolyn Thomson.



the tourist bureaux and CALM offices along the way, meeting people and checking out resources, such as charter boats and accommodation.

"I love my job, especially when I'm planning new things, and I meet a lot of interesting people," said Jean.

"But there's also the humdrum side to it. If you don't look after the smallest details a course can go horribly wrong. So I rehearse the course in my mind to make sure I have got everything right. Quite often that happens about 3 am in the morning."

Jean also arranges natural history courses with people like Boyd Wykes from Perth Wildlife Watch, ornithologists from the RAOU and other experts like John Colwill and Nick Gales.

Any CALM employees with ideas for courses in their area or who would like further information on course programs should call Jean on (09) 380 2579.



SPOTLIGHT ON COLLIE DISTRICT

Collie success with people

An example of how CALM can communicate its objectives to the public about potentially sensitive issues was seen in Collie recently.

As Collie District began clear-felling the Mungalup plantation, clearly seen from the road in to and out of Collie, bordering the backwaters of Wellington Weir, its staff talked to local media and the public about its operations, with special emphasis on CALM's Visual Resource Management.

Collie forest ranger Mort Nilsson said that although the plantation had been developed specifically for timber production on cleared farm land, it had become a scenic part of the local landscape.

The Department's policy on managing operations for the visual resource meant that a balance had to be struck between what people saw from the road, and what was taken out of the plantation.

As a result of informing people about the operation and the rationale behind it, CALM received

no negative feedback about the clearfelling, and was instead the subject of a letter of praise published in The Collie Mail.

"We supplied the timber required, and haven't cut outside the Visual Resource Management boundaries," Mort said.

VRM coordinator Grant Revell worked with Collie and Bunbury foresters to achieve a balance.

The plantation is now being logged in two stages; the first logged area will be replanted next season and the trees allowed to grow to two metres tall before the second stage - highly visible to the public - is logged.

A strip of native vegetation along the edge of the Wellington dam is being left.

Timber taken from the plantation - peeler logs - will be used as veneer and plywood. Large diameter debris left from clearfelling is being burned, with branches and small pine wildlings crushed and rolled to be left as humus for the next crop.

(see photo page 1)



Norm Giblett and Brad Barton look at damage caused by erosion at Honeymoon Pool.

Far from the madding crowd

The unique appeal of fast flowing water and the wild environment of Wellington Dam and Lower Collie Valley area is becoming increasingly popular as people, tired of the congestion of the Murray Valley, seek more room to move appeals to many.

But these same people are placing enormous pressure on existing facilities.

Collie District staff have been collecting data on visitor numbers and their needs to cater for the visitor influx and protect the natural integrity of the area, and work has begun on upgrading and expanding recreation facilities.

At Honeymoon Pool camping and picnic site, the river banks worn by a million curious visitors were in danger of collapse. CALM and Leschenault Inlet Management Authority combined resources and in the last two summers have stabilised the banks with log walls constructed from jarrah regrowth thinnings. The campsite has been modernised, refurbished and expanded to provide a safer, more attractive and functional site.

A temporary camping ground in the area cleared for car parking at Potters Gorge, the site of the 1989 Kings Cup rowing regatta, is also planned.

Fauna numbers now look encouraging

A preliminary visit to Collie state forests before starting a research project there in November proved fruitful for CALM research scientist Keith Morris.

Keith participated in a routine fauna trapping survey in July by Collie district staff to see how many chuditch were being captured along with other native animals. In November he will return to study the effect of fox-baiting on the chuditch.

The survey - encompassing 59 traps on Batalling block northeast of Collie - produced several chuditch, woylies and brush-tailed possums. Bandicoots have also been seen in the area.

Collie forest ranger Brad Barton and reserves officer Rob Brazell have been fauna trapping in two State forests near Collie since last December and have produced encouraging statistics. They have trapped eight individual woylies, 17 brush-tailed possums and 12 chuditch. Although it is too early to form definite conclusions, the results show that the woylie numbers have in-

creased since the advent of fox-baiting, in February.

As part of the Chuditch Management Plan recently published (written by Melody Serena, Todd Soderquist and Keith Morris), Keith is also looking at the effect of fire on the animals, and the effect of log pushing - creating habi-

tat in logged areas.

This month, he will carry out further survey work at Jaurdi Station near Kalgoorlie, to see if chuditch still occur there.

Other projects outlined in the management plan include translocation of chuditch and population monitoring.



Left to right: Brad Barton, Rob Brazell and Shaun Morris watch the release of a brush-tailed possum



Trainee CALM volunteers climbing the steps to the gazebo at Pelican Point. CALM Operations Manager Leon Griffiths in the foreground.

Oral memories in the wheatbelt

by Caris Bailey

CAN you remember when mussels, red fin perch, marron and black duck were common in the upper reaches of the Arthur River? When dairy cows could drink safely from the Avon River pools?

If you can, you're certainly more than 40 years old.

If you can't, stories about wheatbelt wetlands before they were damaged by rising water tables, increased run-off, rabbits and other recent changes have been recorded in a new report.

Oral Histories Documenting Changes in Wheatbelt Wetlands by

Angela Sanders was funded jointly by CALM and a National Estate Grant (administered by the WA Heritage Council and Australian Heritage Commission).

Ms Sanders interviewed 17 people who remembered what the now badly degraded Avon and Blackwood wetlands used to look like.

CALM's Wheatbelt Regional Manager, Ken Wallace, said many of the plants and animals which were common, such as the purple swamphen, native water rat (a marsupial), marron, mussels and nardoo, have disappeared from their old haunts.

"The old haunts have changed dramatically as

well," he said.

"Today, a visitor to Lake Nonalling, near Narrogin, would be hard pressed to translate the lake bed and its dead trees into the sheoaks and paperbarks that formed a dense canopy across it - a refrigerator on hot summer days."

One of the few exceptions to this general trend has been the arrival of the maned duck, or wood duck, in the wheatbelt during the early 1930s and its consequent expansion in numbers. This was the result of the habitat provided by farm dams.

The original tapes and transcripts of the oral histories are stored in the Battye Library in Perth and are available for research.

Well, we asked for it!

By trainee volunteers Ray Wilkinson, Pearl Ager and Anne Hart.

When Marie McDonald from Metropolitan Region placed a small advertisement in the *West Australian* for volunteers, she certainly didn't expect to receive over 350 phone calls in a week. After initial applications were received, the field was narrowed down to 10 people who were invited to attend the training sessions.

Speaking at the orientation session, CALM Regional Manager Drew Haswell expressed his delight at the number of applications "... particularly as the volunteers are a very important part of CALM and its mission".

After an informative introduction to CALM, the trainees heard from volunteer representatives from Penguin Island, Marmion Marine Park, and Canning River Regional Park. What they had to say was of great value, since most of the new volunteers were not familiar with the public lands and waters managed by CALM outside their own sphere of interest.

The orientation session closed with a talk on "Volunteering" by Trevor

Carboon.

Saturday morning saw the group at Matilda Bay to begin a tour of the areas in the Metropolitan Region that are managed by CALM. Ranger Jim Maher gave a brief, but very enlightening talk and it was interesting to learn that there is more to Pelican Point than windsurfing.

The group then travelled on two coaches to Hillarys, where Ranger John Edwards delivered a somewhat humorous talk on Marmion Marine Park and its wildlife.

On to Shoalwater Islands. Each coach carried a CALM guide: Leon Griffiths (Operations Manager) and Graeme Rowland (Reserves Officer). During the pleasant drive south, these two characters were an absolute mine of information.

At Shoalwater, Ranger Terry Goodlich brought us up to date on the complexities of the Marine Park, then gave us a covert fitness test with a climb up to the Point Peron lookout.

Last stop was Forrestdale Lake, a magnificent stretch of water that is home to migratory

birds from as far away as Siberia. Rod Giblett, President of the Friends of Forrestdale, outlined the importance of the lake and how the Friends can become involved.

After an enjoyable day the volunteers returned to Matilda Bay. The training course to this point was summed up by Pearl Ager, one of the volunteers:

"After nine hours training, I now know that bull seals have bachelor pads in the Marmion Marine Park, pigeons have the pox and live on Penguin Island, and arum lilies are not the asset I once considered them to be. Now this may not sound like much in terms of serious knowledge, but I also learned that CALM staff are genuine, approachable people who really want volunteer input. They care as deeply

about the environment as I do and they are generous about sharing their vast store of knowledge.

The third session was one of the most informative, with Marine Park Manager Greg Pobar talking about the magnitude of the marine parks and the diversity of management problems."

The final session of the training program was an interpretation workshop and the volunteers discovered a few interesting activities that CALM staff often use in their community education programs.

For most of the volunteers, basic training is now over. Their next step will be to join one of the Metro Region volunteer groups, knowing they have been provided with a good base knowledge to assist them in their duties.

Wood harvest saves a million

by Carolyn Thomson

A FIRE in a pine plantation near Harvey has prompted a massive harvesting operation.

The 346 hectare plantation was burnt in April after sparks were carried up to two kilometres by strong winds during cyclone Fifi.

Once wood is burnt it is susceptible to insect and fungus attack. The fungus leaves a blue stain and takes only about six to eight weeks to enter the wood, so it is imperative that the wood is harvested immediately.

Twelve timber-fellers were put to work immedi-

ately and managed to salvage almost all the wood, which is currently worth \$1 million. At full maturity it would have been between \$2-3 million.

However, the wood has not yet been sold and is being stockpiled at WESFI mills at Dardanup and Greenbushes.

It has had to be stored under sprinklers to prevent the wood from drying out and the fungus getting in.

In another operation near Collie, some of the oldest and finest quality pine in the South West is being harvested.

However, it is recognised that this particular plantation is an important part of the landscape and CALM is taking care not to change it too dramatically. Landscape architect Grant Revell has been working closely with the district staff to help minimise the visual impact of logging.

Only 25 hectares will be cut this year and the remaining 235 hectares will be removed over the next five years.

Both plantations will be replanted next year.

South-West Aborigines and CALM

by Graham Ellis-Smith

ABORIGINAL people living in WA's South West still have close cultural links with the land.

This has been revealed by a recent study conducted by CALM. The study examines the relationship between Aboriginal activities and nature conservation in an area from the west coast to the eastern edge of the Wheatbelt and south of Beverley.

A working group, comprising Aboriginal Project Officer, Graham Ellis-Smith, John Blyth, Dave Mell, Ken Wallace, David Pearson and Mary Colreavy, set out to identify current Aboriginal activities on Crown land, and their aspirations for future use. The Aboriginal people involved are known as Nyungars.

Their heritage is from a number of different tribes and dialect groups who inhabited the south-west of the State for up to 40 000 years before European settlement.

From 1829, these people were subjected to open hostilities, were disenfranchised from their land by agricultural clearing, and had their numbers decimated by disease.

Today, Nyungars live mainly in towns along the South West and Great Southern highways, and at Collie and Boyup Brook.

More than 120 people in 18 towns were interviewed during the study.

Results clearly showed that, in spite of severe disruption to their traditional lifestyle, Nyungar people still use natural lands in

culturally specific ways. The family unit is the main focus of their activities.

For example, a family will often travel to an area and while the women and smaller children establish a camp site and perhaps collect edible plants, the men and older children will hunt for a kangaroo or other mammals. The food is then prepared and eaten the "Nyungar way".

Important cultural information is often passed on to Nyungar children at these times.

During the study, Nyungars asked for areas where they could continue their cultural activities legally. They also asked for more communication between themselves and CALM concerning the land and

their cultural needs.

Many of the recommendations made by the working group as a result of the study, reflect the need for this communication.

The establishment of a consultative group within CALM to meet with Nyungars on a regular basis, and to conduct wildlife and ecology seminars incorporating both Nyungar and scientific knowledge, are two of the ten recommendations made.

The recommendations will also require Nyungar people to employ some self-regulation within their communities in their use of wildlife, particularly in the Wheatbelt where most CALM land is designated as nature reserves.

CALM and Nyungars share an interest in Crown

land in the South-West.

My own experiences in meeting and talking to these people were rewarding and fulfilling and I believe the often-held opinion that Aboriginal people in the South-West have 'lost their culture' or 'aren't really Aboriginal' is simply not true.

Nyungar people have a great deal to offer nature conservation management.

CALM's management efforts can be greatly assisted by a cooperative approach to wildlife protection and nature conservation with Nyungar people. Recognition of Nyungar's traditional and contemporary affiliation with the land, and their need to continue that through cultural activities is a major step in that process.

Out-foxing island rats

CALM research scientist Keith Morris got more than he bargained for when he ventured onto ABC weatherman Michael Shultz's radio program *Corrugation Street* recently.

Keith had been asked onto the 6WF country-style program to talk about the Department's rat eradication program on Barrow Island.

One caller rang to say that she would like to give

her fox terrier to CALM.

She was trying to get rid of it because it was a good ratter! (Presumably, the dog brought its catches home to her and they were not high on her priority list of acquisitions).

On behalf of the Department, Keith declined the generous offer. Guess he'll just have to stick to sniffing out the little guys himself.

by Tanyia Maxted

Nannup hosts a golf day

Twenty-six years after the inaugural Foresters' Golf Day, it's on again and this time it's open to all CALM employees.

The event, which will be held on Saturday 21 September at the Pine Ridge Golf Club at Nannup, is aimed at getting people together. It is a chance to make new friends and catch up with old friends, and it doesn't matter if you've never played golf or even held a club.

The day begins with the Bush Rangers' Belt, a men's and women's 9-hole Stableford competition (played for points) for non-golfers and golfers with no recognised handicap. This is an '(almost) anything goes' competition with multiple prizes around the course, including one for the hardest worker! Refreshments will also be available around the

course. Tee-off is at 8.00 am.

A light lunch will be served at around 10.30 am.

The afternoon session consists of two team competitions for people with a recognised club handicap - an 18-hole Stableford for men and a 9-hole Stableford for women - and tees-off at 12 noon. Teams must have between three and five members and all team members will be eligible for individual trophies. Teams should be nominated prior to the event and districts may nominate more than one team.

There will be a new trophy this year. The Amalgamated Trophy is open to teams consisting of at least one waged employee, one forest officer and one national park ranger.

Other highlights of the weekend will include a

social evening and barbecue at the Nannup District Amenities Room on Friday 20 September, TV coverage of the AFL preliminary final on the Saturday afternoon in the Golf Club Bar, and a barbecue with the presentation of trophies on the Saturday evening. Accommodation is plentiful with a hotel and motel in town, bed and breakfast, chalet hire, and private accommodation for those prepared to 'rough it'.

The Golf Day has been losing support over the last few years so the organisers have made a special effort to give this year's event a wider appeal. It looks as though they've succeeded, so if you'd like more details check your social notice board.

Alternatively, you can call Michelle Widmer or Shann Low on (097) 56 1101.



Cadets smarten Sharp Point

by Alan Byrne

CALM second year cadets recently completed two weeks' work at Sharp Point in Torndirrup National Park, on WA's south coast.

Their task was to upgrade facilities such as the car park and parking bays, walk trails and look-out platforms and rehabilitate exposed areas.

The project began in March when the cadets attended a one-week Recreation Landscaping

Course in Albany where instruction was given in planning and design.

The cadets were given ownership of the project. Prior to the construction stage they had to order materials, formulate a works program, develop an equipment list and liaise with Albany District to ensure that the program ran smoothly.

They received assistance from Martin Lloyd and Peter Morris who both had great interest in the success of the project.

The instruction phase

took place in May, and after a few initial hiccups, the project was in full swing. The cadets then realised the benefits of pre-planning and scheduling as most tasks ran smoothly for the two-week period.

The project was a resounding success and the cadets are proud of their achievements.

They believe the facilities provided will go a long way towards satisfying public needs and ensuring that the fragile coastline will be better served and protected.



Robert Powell, CALM employee and author of Leaf & Branch, recently spent time with staff and students from a local Perth school showing them how to map plants along a transect. Robert took the students, from City Beach Primary School, step by step through the exercise: laying out the marker tape, noting the positions and types of plant species, making sketches, and taking land height measurements. The fruits of the exercise can be seen in Robert's article entitled 'Drawing the Line', which features in the next issue of LANDSCOPE magazine.

Novel solution to pig problem

by Carolyn Thomson

CALM's Collie district has devised a novel solution to the problem of illegal pig hunting.

Pig hunters around Collie were causing problems on CALM-managed land: illegally entering dieback restricted areas and carrying firearms in State forest. They were also potential dieback carriers.

The regulations that forbade pig hunting were difficult to enforce as most offences occurred outside normal working hours, and limited manpower and money to finance overtime made the problem even more difficult.

A six-month trial was recently undertaken to see if CALM and pig hunters could work together.

One hunter, therefore, was licensed by CALM to hunt pigs in defined areas and under certain conditions. He was given information about dieback hygiene and other CALM operations before hunting started. Under the licence conditions, he must wash down his vehicle before entering some dieback quarantine areas.

The trial was a resounding success, with 93 pigs killed in six months, at no cost to CALM.

"The hunter is happy that he can legally hunt pigs and CALM now has some control over his ac-

tivities and benefits from a free feral animal control service," Collie District Manager Peter Moore said.

The cost of pig control normally ranges from \$50 to \$200 a pig, depending on the technique used and

the number of pigs in the area. Due to the interest generated by the trial it is planned to expand the number of hunters to five next summer, and it may also be used in CALM's other forest districts.

Testing the waters at Monkey Mia



(Photograph courtesy of the West Australian)

CALM Ranger Lindsay Brown has been testing the quality of sea water at Monkey Mia to make sure that increasing numbers of people and the new resort developments do not affect the dolphins that regularly visit the shores.

Samples from four beach locations and six sea water sites were taken and tested for bacteria, nutrient and algae problems. Some of the samples were frozen and flown to Perth for further testing.

The two-week intensive study of the local water was conducted as part of a regular monitoring program, and, so far, no problems have been found.

Left: CALM Ranger Lindsay Brown with the water monitoring equipment used at Monkey Mia.

KARIJINI NATIONAL PARK

HAMERSLEY Range National Park has been renamed Karijini National Park following a State Cabinet decision in April.

Karijini is the Aboriginal name for the mountainous range running through the park and its adoption reflects the significance of this area to traditional custodians.

While the park has been named, the range itself will remain known as the Hamersley Range.

STAFF NEWS

Appointments

Peter Hollings, Computer Technician, Information Systems, Como; Chang Fang, Collection Manager, Herbarium.

Promotions

John Kaye, to Senior Forest Officer, Bunbury; Joanne Evans, Administrative Assistant, Information Systems, Como.

Transfers

Rex Walker, Ranger-in-Charge, Peron National Park; Steve Dutton, Ranger-in-Charge, Yalgroop National Park; Nathan McQuoid, Acting Ranger-in-Charge, Fitzgerald National Park.