

# CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

ENVIRONMENTAL RESOURCE CENTRE  
DEPARTMENT OF CONSERVATION  
& LAND MANAGEMENT  
WESTERN AUSTRALIA

December 1991-January 1992

## Rainforests and the Nullarbor

**THE breadth of CALM's conservation and land management responsibilities was highlighted recently when public attention was focussed on Kimberley rainforests and the treeless Nullarbor - the Editor.**

Environment Minister Bob Pearce launched a major new book on WA's unique Kimberley rainforest, which have a total area of only 8 000 hectares.

*Kimberley Rainforests* was edited by CALM scientists Norm McKenzie and Peter Kendrick, and by Richard Johnston, a zoology graduate at the

University of Western Australia. The State's rainforests were recognised by scientists less than 30 years ago.

These rainforests are scattered along the Kimberley coast.

"*Kimberley Rainforests* is the result of the first comprehensive ecological study of the area, begun in 1987 with a grant from the Federal Government's national rainforest conservation program," Norm McKenzie said.

"The CALM study combined the skills of 15 scientists - specialists in remote sensing, botany, zo-

ology, soils, conservation ecology and biogeography.

"The first problem was how to survey the 170 000 square kilometre study area. This was solved using Landsat information.

### 1 500 patches

"Of the 1 500 rainforest patches that were discovered, the largest measured nearly 100 hectares, although the average area is less than four hectares.

"The intensive ground surveys that followed provided a wealth of information about our rainforests.

"More than 450 plants were collected, 80 per cent

of which are found nowhere else, and 140 bird species and about 120 species of land snails recorded.

"*Kimberley Rainforests* contains 21 scientific papers covering all aspects of this work. It will be a source for future research, monitoring and management.

"Nearly three quarters of Australia's rainforests have been cleared since European settlement and those remaining are now under threat from feral cattle and fire," said the Minister.

"Community support is needed if we are to protect Kimberley rainforests.

"Individuals, local

government and industry can all play an important role in conserving these remnant forests.

\* \* \*

Environment Minister Bob Pearce also announced the boundaries of the West Australian study area for the proposed Nullarbor Plain World Heritage listing.

This followed negotiations between the State governments of WA and SA and the Commonwealth.

"The study to determine the area's values can now proceed," Mr Pearce said.

"Only two pastoral leases are included in the WA study area - Madura

and Mundrabilla, both of which have significant caves and other features.

"There will be close consultation with local people and a range of relevant organisations."

Mr Pearce said the seven million hectare study area included existing and proposed conservation reserves on the northern and eastern Nullarbor, such as the Great Victorian Desert Nature Reserve, the Nuytsland Nature Reserve along the coast and vacant Crown land.

The offshore boundary is yet to be determined, but is expected to be between

three and 12 nautical miles offshore.

The Nullarbor features -  
•the world's largest arid zone limestone landscape, including caves, blowholes, cliffs and meteorites;  
•Aboriginal occupation, including ancient flint quarrying, art and living sites;  
•biological features, including several species unique to the area; and  
•marine features of the Great Australian Bight, notably the calving and nursery grounds for the southern right whale.

The area's nomination for listing may be ready by September 1992.

## Sandalwood conservation

**A 10-YEAR plan that will see Indian sandalwood plantations being developed in the Ord River Irrigation area, was announced recently by Environment Minister Bob Pearce.**

"The plan will see the eventual reduction of harvesting of native sandalwood, while maintaining a viable export industry, he said.

"Sandalwood harvesting was one of WA's earliest export industries, dating from 1845, with south-east Asia the main market for this highly valued wood.

Both dead and green sandalwood trees are harvested, mostly from the Goldfields and the Murchison.

There are 110 000

tonnes of green and 27 000 tonnes of dead sandalwood available for harvesting in WA at present.

Under the new management plan, green sandalwood will continue to be harvested from Crown land at a rate of 1 800 tonnes per year with the harvesting of dead wood decreasing over the next 20 years.

"From the year 2020 or thereabouts, plantations will become increasingly important and the need to harvest native sandalwood will be diminished," Mr Pearce said.

"In the longer term, the 50-year projections allow for the harvesting of 13.7 per cent of existing green sandalwood trees in WA - that's without taking regrowth or regeneration

into account.

"The distribution or conservation status of native sandalwood will not be adversely affected by such harvesting.

Returns from the industry, benefits to research, arid land conservation and sandalwood management will far outweigh any possible impacts.

"Sandalwood conservation is a high priority and the State government has committed resources through the Sandalwood Conservation and Regeneration Project (SCARP).

"The government has already purchased pastoral stations carrying stands of sandalwood for conservation under this project," he said.

## Matilda Bay draft

**THE recent launch of the Matilda Bay Reserve draft management plan created more public interest than CALM planners had expected.**

Environment Minister Bob Pearce released the draft plan in early November.

The plan, prepared by CALM for the National Parks and Nature Conservation Authority, contains a number of proposals for providing better facilities and access to the river through the Reserve.

The plan also looks at alternatives to local traffic problems, including the

by  
Tanya Maxted

closure of Hackett Drive to through traffic and the building of a ferry jetty on the Crawley foreshore.

On its front page, a community newspaper vented the ire of some local residents at the idea of any alteration to Hackett Drive.

Mr Pearce replied, saying that residents had jumped to conclusions based on misinformation about the plan.

"The area is a very popular spot and people want more picnic areas and

barbecues, better toilet facilities and solutions to the well known parking and traffic problems," he said.

"The plan does canvas the option of closing Hackett Drive to through traffic, but also suggest that traffic could be slowed down so that the drive becomes a scenic drive rather than a through road.

"The draft plan is just that - a draft only," the Minister said.

"I urge anyone interested to make a submission in the two-month period open to them."

Submissions are being accepted until January 10, 1992.



CALM's Gillian Morris and Gary Hunton load Christmas trees. Photo by David Gough

## Christmas trees for YMCA

**ONCE again Wanneroo District staff are doing their best to make sure Perth families are not without a Christmas tree to decorate and admire.**

From December 4, they have been cutting some

1 500 nursery-grown *Pinus pinaster* trees daily. About 12 000 were distributed - 8 000 of which went to the YMCA at Melville, with the rest going to several charitable and community organisations. The YMCA

by  
Verna Costello

distributes the trees to Perth metropolitan Target stores and selected service stations where they are sold to the public right up until Christmas Eve. Forest officer Mike Meinema said that in recent years staff at

Wanneroo had been patiently working on developing a more conical-shaped tree to rival that of the northern hemisphere Christmas tree.

"They should be available by Christmas 1997," he said.

"With a bit of luck we may even have them by Christmas 1996."

## Admin seminar

**SIXTY CALM staff attended the recent Administration Seminar held at the Como Training Centre. They travelled from all over the state, representing districts and regions from Esperance to Kununurra.**

The meeting was opened by Dr Syd Shea, who appealed to administrators to remain optimistic during these tough economic times and pointed to the many successful projects CALM is involved in. During the three-day seminar, issues covered in a tightly packed

by  
Marg Wilke

agenda included finance, health and safety, human resources, information systems, internal audit and operations.

Although Oracle, the Department's financial system, had caused many people sleepless nights the new system is now widely accepted.

The chairman, Ian Frame, thanked Ric Curron for the work and special effort he put into organising the seminar which was beneficial to all CALM administrators.



Bruce Baskerville, University of WA Undergraduates Guild President (left), discusses the finer points of the Matilda Bay draft management plan with Colma Keating, a member of the National Parks and Nature Conservation Authority. Photo by Alan Padgett





THIS has been another big year for CALM. Fortunately, we have been involved in fewer controversial issues but it has been a year of major achievements and continual change.

The year has ended on a sad note because we are losing a number of very long-serving, dedicated and loyal people. I haven't added up all the years involved, but a number of the people who have taken up the redundancy option have had more than 35 years' service to their credit.

At a time when the public sector is under attack and when there are various proposals throughout Australia directed at reducing its role, I think it's important to remind ourselves of the huge contribution that has been made by the people who are retiring. I have no problems with the proposal that we need to change the way we operate in Australia, and in particular the public sector. But we also need to be careful that we don't change the system in a way that results in the public sector not having people in it who are prepared to give it loyal and dedicated service.

In the year ahead one of our major tasks will be to make this Department even more efficient. There is no question that we are going to be constantly squeezed for resources, even though the demand for our services is increasing.

One theme that I will be developing will be the need for an even greater integration of our Department than already exists. This is one of the major ways by which we can achieve efficiencies. It is interesting to note that other agencies around Australia are moving in the same direction.

But greater integration must not mean lack of identity with the Department and a lack of focus on critical issues.

Over the next few months the Corporate Executive will review the way it operates, to make sure that CALM continues to gain the benefits from integration, while developing management systems that allow it to focus on issues.

No matter how we organise the Department, the way we perform will always depend on the quality of the individuals who make up the Department. CALM is extremely fortunate because of the quality of the people who make up the organisation.

Thank you and your families once again for a fantastic effort and best wishes for Christmas and the New Year.

Dr Syd Shea, Executive Director

## STAFF NEWS

### Appointments

**Desmond Lim**, Database Administrator, Information Systems, Como from Treasury.

### Promotions

**John Brealey** to Field Manager, Sharefarming, Manjimup; **Greg Mair**, Senior Forester, Walpole.

### Transfers

**Anne Holt**, Officer, to Albany; **Lindsay Brown** from Mobile Ranger to Ranger, Fitzgerald River National Park.

### Retirements

**Dr Barry Wilson**, Director, Nature Conservation.

## Big Brook relay bagged by Manji

**THE Wheatley Mair, John Lloyd, Mark Wagglers from Radomiljac, Steve Manjimup were the winners of the 1991 Big Brook relay. Peter Radomiljac and Leon Price.**  
They comprised Greg Congratulatory team!

## CALM NEWS - DECEMBER 1991-JANUARY 1992

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# Looking ahead to 1992

AN INTERESTING but little talked about practice is that of reflecting on the bleakest moments in one's life and focusing on the turning point - then try to remember if we could have foretold the events that brought about that upward turn in our affairs. Often we find there was no way in the world we could have foreseen them or have been responsible for their occurrence.

That's why its so important to maintain a positive outlook so that when the tide does come in, (perhaps when we least expect it) we're leaning forward ready to catch the big wave and go with the flow. The following are the positive minded predictions of the General Manager and several of CALM's divisional directors.

## General Manager

**I ALWAYS look forward to every new year in CALM, because there is always so much of interest happening and because we all have so many opportunities for professional achievement, hard work and fun.**

In having a job at all we are lucky these days, but to have such interesting jobs we are especially lucky in CALM.

I will be concentrating on three particular things next year. Firstly, the necessary restructuring and reappointments associated with our staff reductions and tight budget. Secondly, the operational side of implementing the new Nature Conservation and Forest Strategies.

Thirdly, I will be continuing with my preoccupation of the last five years on improving strategic planning and integration of resources across boundaries within CALM.

We have made tremendous progress in getting people from different sections, disciplines, unions, districts, etc., to work co-operatively, but I still regard this as the major barrier to real efficiency in CALM.

Although the point is to look ahead to 1992, I would like to look back briefly and to record my thanks and appreciation to everyone who worked so hard for CALM and especially my immediate staff for their continued personal support in 1991.

**Roger Underwood, General Manager**

## Forest Resources

**BEFORE looking ahead to '92, let's look in Forest Resources Christmas stocking. Is it filled to overflowing? Sadly not. Filled with holes and empty? Gladly not!**

As for freebies for all CALM staff there are Christmas trees - and if you don't get one - it's your own fault.

Then there's free firewood for fossickers - still on in 1992 but please obey the rules in Briefing Paper 2/91.

Now for the serious stuff.

There will be a new forest strategy in 1992 which will profoundly affect the way in which State forests will be managed.

The way in which National Estate areas are managed will be formalised.

OBM, already conceived, may well be born (and perhaps celebrated at the OBH). You'd all know what OBH stands for, wouldn't you? OBM means 'One Big Mill' (a softwood mill).

New Forest Regulations under the CALM Act will be gazetted. These comprehensive regulations will at last cover the current system of regulating sales of forest produce.

New Jarrah Inventory has been completed and will form the basis for negotiating new Contracts of Sale, being part of phase two of the Timber Strategy.

Feature sawlogs suitable for the wood-based craft industry will be tendered. The Department is keen to foster this developing value added industry.

The use of drying kilns to increase the quantity of dry sawn material is now accepted by all sectors of the sawmilling industry. CALM has developed a low-cost solar kiln which is proving popular.

We will round up the illegal firewood operators.

We will plant another 2 000 hectares of pines in sharefarming agreements.

Increasing areas of regrowth karri forest will be thinned commercially as stands reach an appropriate size.

This reads like a politician's promises and I can hear you crying: "Where's the money coming from?" Here's where:

•The Plant Propagation Centre will run at a profit.

•The Wood Utilisation Research Centre is a Business Unit.

•The Tree Planting Fund will be expanded to enable timberbelt sharefarming to continue.

Timber royalties will be maintained while overall costs will be contained through implementation of contractor coupe management and training. The staff of harvesting contractors will perform more forest management tasks as

part of their normal operations. This measure will release existing CALM staff for more interesting and varied work.

Private investment in tree growing projects will expand given that additional markets for timber products, especially low grade material, are now secure due to the expansion of the particle board factory, the commissioning of the Medium Density Fibreboard Mill and the small log line at the Diamond Mill.

Happy Christmas!  
**Don Keene, Director of Forests.**

## Operations Division

**MY EXPECTATIONS of the Operations Division are:**

•To improve our leadership in Districts and Regions and develop strategic plans in those regions and districts where these are currently lacking.

•To adopt the principles of Quality Improvement and try to develop quality management as an ethos in all areas of operations, i.e., make it a way of life.

•To improve our industrial relations with unions, advance the principle of structural efficiency and gain measurable industrial flexibility in all our operations.

•To maintain and enhance our high profile in local communities and continue to deal honestly and in a friendly way with our clients in the community.

•To direct our efforts towards the most important issues, based on clear directions from Directors of other Divisions, in relation to priorities within their programs.

•To eradicate more foxes in priority areas and help get some endangered flora recovery programs under way.

•To review our activities in Forest Resources programs, particularly in respect to employment in the forest and fire control requirements, and determine options to resolve problems identified.

**Jim Edwards, Director (retired).**

## Information Resources Division

**FOR Land Information, the year will bring a special challenge. The work we have been doing with the joint CALM/Australian Heritage Commission forest study and the new Forest Management Strategy has shown just how crucial our Geographical Information System (GIS) is to the**

**achievement of our management goals.**

Clearly, we need to rapidly decentralise the use of GIS so that field managers can carry out the sophisticated planning and more highly complex management these new initiatives will require. However, this will require an injection of funds for equipment and human resources, which presents us with a dilemma, given the current economic climate.

For the Library, the coming year will see the implementation of on-line access to information on library holdings.

For Records, a new initiative will be the extension of the Como file classification system to some regional and district centres. It is anticipated that this move will greatly improve information retrieval. Later in the year, the computer-based Records Management System will be opened up to regions and districts.

A major thrust for the Information Systems Branch will be the production of a new Information Technology Plan for the Department, blending all main streams of CALM information management. We will also be taking steps to improve our database management.  
**Frank McKinnell, Director.**

## Parks, Recreation and Planning Division

**CHRISTMAS arrived early for Parks, Recreation and Planning Division.**

On December 1, the Division moved into new offices at 16 Ogilvie Road in Mount Pleasant, a block away from Murdoch House and about 100 metres from Canning River.

Telephone and fax numbers are the same, so call them for the same friendly service as ever.

The new office is tastefully decorated to the Division's requirements with the three Branches - Planning, Policy and Extensions, and Recreation and Landscape - located on the same floor.

A Christmas bonus is the relocation of the Division's graphic design unit to Ogilvie Road from Como.

With Christmas out of the way, the Division's New Year resolution is to develop, along with the Swan Region, the strategic plan for Perth Outdoors and the Hills Forest.

These and other initiatives, such as the external funding program are expected to provide a financial bonus for the Department along with a more aware and supportive community.

Divisional staff wish all

Regional, District and Specialist Branches a Merry Christmas and prosperous New Year, and look forward to continuing close working relationship with departmental colleagues in 1992.

**Chris Haynes, Director**

## Corporate Relations Division

**IT IS far easier to look back and see what we've accomplished than it is to look ahead and foretell what is coming.**

**However, crystal-balling is the purpose of this CALM NEWS feature and that is what I'll try to do here.**

In 1992, Corporate Relations, working alongside regions, districts and specialist branches, will seek new and improved ways for the Department to be heard and understood by the community, and for the public's views to be heard and understood within CALM.

Emphasis in the coming months will be on public awareness and involvement campaigns for the Nature Conservation and Forest Management strategies, on implementing a forests and forestry community education program, on public relations programs concerning *Desert Dreaming* and on the ture of dieback disease and what people can do to restrict its spread, on communications and marketing of *Perth Outdoors* and *Hills Forest*, on rationalising and making more customer-driven the recreation materials produced by the Department, and on finding new ways to improve communications within CALM.

CALM's relationship with the regional and country news media during 1991 was healthy and productive and this will likely continue as an ever-improving trend in 1992, due largely to some excellent and improving community relations work by regions and districts.

In the Metropolitan area, where there is a greater clutter and complexity of issues v... attention, there is more scope for improvement.

Seeking media coverage for CALM and responding to media interest in the Department in this major media market will be a priority, keeping very much in our minds that the value of good will is most evident when it is absent.

And of course, I look forward to four more issues of *LANDSCOPE*, 11 of *CALM NEWS*, and to keeping the cash registers in bookstores and newsagencies throughout WA busy with exciting new and important publications.  
**Ron Kawalliak, Acting Director.**





Hills Forest Manager Stev Slavin and Swan Region's Coordinator Community Communications Rae Burrows, discuss Bill Carter's comments on the forthcoming Perth Outdoors plan.  
Photo by Verna Costello

# Finger printing comes of age

by  
Graham Hall

FOR many years ecology has been the dominant force in conservation and the study of genetics was considered irrelevant.

This was partly because of the immediate needs of protecting species and habitats. But in the long term, genetic principles are very important to conservation.

The aim in wild species conservation is to preserve the gene pool required for survival and continuing adaptation to change.

Management of endangered species gene

use of the technique, particularly in medicine and forensic science.

Now DNA fingerprinting is being applied increasingly to conservation studies around the world.

In WA, Professor John Wetherall and David Groth of the School of Biomedical Science at Curtin University, jointly with CALM, are applying the technique to a variety of conservation projects.

These include paternity analysis of dolphins at Atlantis, population dynamics of rock-wallabies, breeding management of the western swamp tortoise and in the battle against the poaching of cockatoos.

Results of some of these projects were presented during a recent CALM research division seminar

- Application of DNA Fingerprinting to Conservation Studies in WA - which outlined the method of DNA fingerprinting within the broader context of conservation genetics.

With over 30 people from CALM, CSIRO, the Agricultural Protection Board (APB) and universities attending the seminar, interest in the uses of DNA fingerprinting as a conservation tool is obviously running high in Western Australia.

For example, the CSIRO is using it in its fairy wren project at Helena Valley, as is CALM in its research into the biological control of foxes.

Further information can be obtained from Graham Hall at Woodvale on (09) 4055161.

# Perth outdoors excites expert

by  
Peter Sharp

RENOWNED forest interpreter Bill Carter was in Western Australia recently to help develop the Perth Outdoors Strategic Plan.

Bill, a forester and biologist who established, and has operated the Brisbane Forest Park for five years, was invited by Director of Parks, Recreation and Planning Chris Haynes to give details of his experiences.

During his one week visit, Bill, accompanied by Rae Burrows, Alan Sands and Peter Sharp, saw the good, the bad and

the ugly sides of the Swan Region.

But by the end of the familiarisation tour he was ecstatic, seeing opportunities for CALM to make use of Perth's natural resources to communicate the Department's conservation message to the community.

Bill's message to the corporate executive was that CALM, as natural resource managers, had to be sure that the public,

other government and non-government agencies, became more aware of the diverse values of the areas used and managed by each agency.

This means CALM improving its understanding of the values of the natural resources managed by the Department and finding out what is important to people.

He said CALM officers as land managers were leaders in the field but they could still make a more positive contribution to the interpretation of our environment and its use for recreation and education purposes.

A clearer understanding of what constitutes Perth Outdoors was gained by staff who participated in a one-day workshop, arranged by Policy and Extension Branch Manager Jim Sharp, to coincide with Bill's visit.

Through a planning

process involving staff from the Swan Region, each of its Districts, and the Parks, Recreation and Planning Division, workshop participants arrived at a range of suggestions of how managers, specialists and field staff could encourage people to get outdoors and enjoy nature.

Perth Outdoors Strategic Plan will incorporate much of the information generated from this workshop.

# Space age pics

NANNUP District, long renowned for its annual golf day, has set the pace again by being the first district to utilise space age photography in its integrated management planning.

During a visit to Land Information Branch, Nannup District Manager Roger Banks was shown the satellite imagery being used for aerial surveillance maps and was quickly con-

vinced of the benefits of having a copy of the composite photograph for his district. Land Information Branch was able to cost out the complete project and, following the go ahead from Roger, set about assembling the 1:50 000 mosaic.

The satellite image, with map overlay, will assist district officers in identifying land use throughout the south-west and will

complement their other planning information. The composite photographic image, taken in December 1990, is mounted on a board measuring 2.5 x 2.0 metres.

For further information about LANDSAT imagery, contact Phil Poole, Acting Program Manager, Corporate Services Section, CALM Land Information Branch, telephone (09) 367 0342.

# Wildlife and sailing ships

CALM supervising wildlife officer Doug Coughran gave several educational talks about marine mammals during a weekend of sailing and whale-watching on the 11 training ship *Leeuwin II*.

The large, three-masted ship is a floating training facility. Operated by the Leeuwin Sail Training Foundation, it was built to help people mature and develop self-esteem, discipline and teamwork.

The passengers were a good cross-section of the community, from home managers to professional people.

Doug volunteered his time to give talks on the whale-watching season and industry, the various whale species, particularly humpbacks and southern right whales, and discussed statistics from last year's season.

On the second night he

discussed marine mammal management, and outlined CALM's role in strandings and monitoring human and wildlife interaction.

He also helped to spot migrating humpbacks and the group saw several whales on both Saturday and Sunday.

Like the other 54 people on board, Doug had to help sail the ship.

"It was a learning weekend and it was hard work, but very rewarding," he said.

The *Leeuwin II* passengers were just one of many groups that CALM wildlife officers have addressed this year about wildlife management.

They have conducted Westwhale workshops, visited schools and nature groups, participated in the seminar leading into the whale-watching season and handled a vast number of day-to-day enquiries from the public.

# New CFOA logo design

FIELD staff and members of the public are invited to submit designs for the new CALM Field Officer Association (CFOA) logo competition.

The logo will be used to identify the association and

will be used on all official correspondence.

The WA CALM Field Officer Association is a sub-association of the WA Civil Service Association and its role is to assist the CSA to promote and protect the benefits of members.

The theme for the design should describe the work that CALM officers perform in carrying out their duties of managing CALM lands. These duties include conservation, production, protection, (fire and environmental) and recreation.

First prize is \$500. Second prize \$250.

The competition closes with the last inward mail on January 31, 1992. No late entries will be accepted. Judging will be by every financial member of the CFOA having the opportunity to nominate a first, second and third preference. The result will be decided by a majority of first votes unless the result is within ten votes, when the second preference will also be considered, then, similarly with the third preference.

The CFOA reserves the right to modify or alter any design submitted and the winning entry may not necessarily be used by the CFOA. All designs submitted become the property of the CFOA.

For further competition details, technical requirements and official entry forms, please phone Ian Old - 367 0397 or Gerry van Didden - 367 0377 or write to:

Ian Old, Design Competition, WA CALM Field Officer Association, PO Box 104, Como WA, 6152.

# Gum leaves for Japan

by  
Grahame Rowland

WHEN Forester Kevin Pollock was asked recently to provide half a tonne of eucalyptus leaves and litter it was seen as 'no big deal' - Mundaring staff being accustomed to strange requests.

The leaves were for part of the Australian display at an international building exhibition held in Japan in November.

The display featured mostly Western Australian products with the leaves being used to re-create the atmosphere surrounding our jarrah forests. Kevin said that before despatch, the litter had to be fumigated by the Department of Agriculture to ensure it did not contain insects.

"The consignment was

very bulky, taking ten wool bales to make up the half tonne," Kevin said.

On the lighter side, Kevin said we may have a solution to an occasionally controversial issue.

"Maybe we could rake up the litter and send it to Japan instead of carrying out controlled burning to reduce bushfire risks," he said.

The exhibition featured 250 displays from around the world and was expected to attract over 120 000 visitors a day, including Japan's foremost architects and designers.



Forester Kevin Pollock up to his elbows in gum leaves.  
Photo by Grahame Rowland



# How to unrubbish your rubbish



Illustration by Sandra Mitchell

AT THIS time of the year when most people are getting ready for Christmas, there is usually a parallel panic of cleaning, tidying up and throwing out.

Regardless of the time of year, Hugh Clift asks staff to become 'archive-conscious', and if in doubt phone library staff before disposing of books, documents, photographs, graphics, posters, pamphlets, brochures, etc. Hugh says there is a common misconception that if a document has been revised, the earlier

document is of no use.

'That is not always the case. Even if it is a brochure which contains information that's no longer relevant, please check with us before throwing it away,' he said.

CALM's Woodvale library contains archive material dating back to the 1890s and Hugh hopes to develop a very comprehensive collection, not only of CALM publications and paraphernalia but also publications from the Forests Department, the National Parks Authority and the Bureau of Flora and Fauna.

## Zig-zag find

by Mike O'Donoghue

SHELTERING under a tree during heavy rain in the Rugged Hills Nature Reserve at Toodyay, provided Swan Region's conservation forester Les Robson with a lucky break.

Waiting for weather conditions to improve, Les had an opportunity to examine nearby vegetation.

The occurrence of what first appeared to be a common *Grevillea* some 30 metres away, drew his interest.

Realising that the habitat was not quite right, however, led him to believe that the species could be the very rare *Zig-Zag Grevillea*, *Grevillea flexuosa*. The habitat was right and subsequent identification confirmed his suspicions!

A total of 950 plants were located in the Nature Reserve and adjoining private property.

Les believes that but for the rain break the species could have remained

undiscovered for some time.

The Zig-Zag *Grevillea* was presumed extinct for about 150 years before its discovery in about 1989 by Gwen Abbott, a member of the Eastern Hills branch of the Wildflower Society. This latest discovery is the second known population, and is the largest yet found.

Its location in a CALM nature reserve will considerably enhance the long-term status of the species in the wild.

## New on the shelves

THE following publications were produced recently and are available from Stores Branch, Como:

- Reprint - Nambung National Park brochure.
- Reprint - Kalbarri National Park brochure.
- Draft Management Plan on Matilda Bay Reserve.
- Forest Affair quiz sheet.
- Wildlife Management Program No. 8 - on the management of sandalwood.
- Marine Explorer - Cecil the Sea Anemone - an education resource booklet.
- Summer Firewood - a brochure on where to collect firewood before next winter.
- Kimberley Parks - a newspaper on recreation in the region.
- Trees - An Investment for the Future - Proceedings of Albany seminar.
- CALM Annual Report - 1990-1991.
- National Parks and Nature Conservation Authority Annual Report - 1990-1991.

## Mini mite - major find

A TINY primitive mite, collected during a rainforest survey organised by CALM in the northern Kimberley has been identified by the Western Australian Museum as the *opilioacarid* mite.

The 1.5 mm mite was found by Jonathan Majer (at the time, a senior lecturer in entomology at Curtin University's School of Environmental Biology) who was invited by CALM to participate in the survey, specifically to study ant fauna.

Jonathan said the mite was found in leaf litter near a cave on the Carson escarpment.

'It's a routine practice during such a survey to collect handfuls of leaf litter and drop them into cotton mesh bags,' he said.

by Verna Costello

'The bags are then hung in a sunny area and as the litter dries out, the animals crawl out and drop into a bottle of alcohol.

'Preserved in this way, specimens of unknown animals are sent to the WA Museum for identification.'

The single specimen - the first *opilioacarid* mite to be recorded in Australia - originated when Australia was connected to south-east Asia.

Museum curator Dr Mark Harvey said that the discovery of the mite, a relic of the age of the dinosaurs, was of national significance.

He described it as 'the arachnid equivalent of the platypus and the echidna', and said it would provide us with additional clues on

the history of Australian fauna.

'While much of the fauna of Australia is recently derived from Asia or more distantly from Gondwanaland via South America, the *opilioacarid* has its closest affinities with species from Madagascar, southern Africa and Thailand,' he said.

'The Thai connection can be explained because that part of south-east Asia was connected to Gondwanaland (along with Madagascar, Africa, India and Australia) until 150 million years ago.'

The scientific description now being prepared for the Australian species will add significantly to our knowledge of the evolution of *opilioacarids*, of which there are only 20 known species throughout the world.

## Best sellers for reprint

TWO popular books from CALM's nature guide series have sold out and are being reprinted. The books are *Range to Reef* and *Wild Places Quiet Places*, which is being reprinted for a second time.

Minor revisions have been made to both publications in consultation with CALM regional staff.

'Despite the recession,

public demand for CALM publications has continued to grow over the past 12 months and most of our publications are selling very well,' said Ron Kawalilak, Acting Director of Corporate Relations.

'This is very important if we are to continue to publish books that educate the public on issues pertaining to conservation and the process of land

management, while developing public understanding and support for the work of CALM.'

Wholesale value of CALM books sold through bookstores and newsagents between July and November 1991 was \$67 199, up 42 per cent from sales of \$47 208 during the corresponding period a year ago. When compared with 1989 - 90,

sales for the first five months of this year are up 181 per cent.

CALM's books and other publications are available from CALM offices and through 164 booksellers in the Perth metropolitan area and a further 135 country outlets. *LANDSCOPE* is available from more than 360 outlets throughout Western Australia.

# The Year

## January

THE year began with record breaking temperatures and about 60 separate bush fires in an area stretching from Cervantes to near Albany.

The biggest of the fires began just south of Yanchep and burned ferociously for three and a half days. The high air temperatures and brisk winds made conditions extremely difficult for the fire fighters, but, despite these problems, no lives were lost to the fires themselves.

Interviewed shortly after the fires had been controlled, Dr Syd Shea said, 'It was a tremendous tribute to the fire fighters that the fires had been brought under control so rapidly and efficiently and I am particularly proud of the tremendous efforts by CALM crews and staff.'

Also in January, the State Government announced it was joining with South Australia and the Commonwealth Government to assess 10 million hectares of the Nullarbor Plain for World Heritage listing.

## February

NO SOONER had the smoke died down from the fierce fires of January, when a potential disaster struck our south coast.

The bulk carrier *Sanko Harvest* ran aground off Esperance, spewing more than 700 tonnes of heavy bunker oil into the sensitive Recherche Archipelago. Nearly 200 New Zealand fur-seals living on Hood Island and Seal Rock were coated in oil, and beaches in Cape Le Grand National Park were polluted to the high tide mark. In the month following the spill, 40 pups died. More than 30 CALM officers from Esperance, Albany and Perth, as well as many volunteers and paid casuals were involved in the clean-up which dragged on for two months. Nine months after the spill, a cove in Cape Le Grand National Park was still heavily polluted and a decision is yet to be made on whether or not the site would be used again for a clean-up operation.



## March

IN EARLY March, CALM officers and volunteers successfully caught a three-metre crocodile that had been stalking Willie Creek, 28 km north of Broome.

Just over one week later officers were called to remove two aggressive saltwater crocodiles from popular spots near Kununurra. The first was more than four metres long and was reported after it attacked a couple canoeing at Chamberlain Gorge. The couple had a lucky escape and swam ashore to safety. The other crocodile was about three metres long and acted aggressively toward three men fishing in a

dinghy at the junction of the Dunham River and Ord River. Unfortunately, after an extensive search, the animals managed to evade capture.

Russell Gueho, CALM's wildlife officer in Kununurra warned people to be 'crocodile wise' and not to paddle, clean fish, prepare food, or camp the water's edge.



## April

ON 3 APRIL the State Government the creation of a new national park Lesueur. Premier Carmen Lawrence that the 27 500 ha Mt Lesueur National Park would protect an area of world nature-conservation significance.

The announcement brought to an end several years of exacting assessment of the and debate about its future.

Fire struck again in early April, Kalbarri National Park. The fire bur along the main road to Kalbarri, but

brought under control.

Meanwhile, the WA Farmers lent its support to CALM's control the Stirling Ranges. Mr Terry En Barker farmer, said that the initiati most significant effort in reducing f in the park in the past 30 years. 'I done an excellent job planning a coordinating a controlled burn of 25 0 hectares centred on Bluff Knoll,' Enright said.

Later in the month, CALM of were called to two whale strandings north. Nine whales died after be themselves about 200 km north of



# Albany Review



and a further 28 whales were found dead after becoming stranded at Sandy Point, about 150 km north of Broome, just two days later.

## May

A FEMALE sea lion was found dead on Cheynes Beach, about 40km east of Albany. CALM officers investigated the death and found that the sea lion had died as a result of a gunshot wound. This followed the shooting of a sea lion in Oyster Harbour, near Albany, in November 1990. Sea lions are protected under the Wildlife Conservation Act and there is a maximum penalty of \$10 000 for harming them.

A joint operation between CALM officers, their South Australian counterparts, and Customs and Taxation officers uncovered an illegal export trade in West Australian sandalwood. Two men were arrested and fined for taking flora from Crown land without a licence. Up to 100 tonnes of sandalwood was thought to have been stripped from Crown land around Eucla and Mundrabilla.

## June

JUNE brings Arbor Day, the annual celebration of trees. The theme for this year was dieback awareness and the first Dieback Speakers Kits were presented to Rotary District 946 as support material for their dieback campaign. Arbor Day was also marked by a display at the R&I Bank in St Georges Terrace, Perth, entitled 'Greening the West'. The usual LANDSCOPE children's poster competition was held in conjunction with ABC 6WF and it attracted more than 7 000 entries.

Australia's most endangered animal and one of the world's rarest species received a further boost to its chances of long-term survival when, for the third year in succession, 16 western swamp tortoise eggs were successfully hatched at Perth Zoo.

## July

THE Resource Assessment Commission released its draft report on the future use of Australia's forest and timber resources. While welcoming the chance for further public discussion on the future of our forests, Dr Shea said the draft report made many statements about forestry which either didn't apply to WA, or hadn't applied for decades.

The tender to build a \$97 000 tour boat for Geikie Gorge was won by Albany boatbuilders, providing a boost both for tourism and local industry. The north west freight company, Gascoyne Trading Pty Ltd, later carried the boat free of charge from Perth to the gorge.

CALM's latest nature guide book,

*Wildflower Country*, was launched. The book covers the flora-rich area from Jurien to Shark Bay and inland to Meekatharra.

The year's second oil spill threatened wildlife along the Jurien coastline when the Greek oil tanker *Kirki* struck trouble. The spill highlighted the need for a Departmental contingency plan and for lessons learnt from the *Sanko Harvest* operation to be shared among CALM staff likely to be involved in similar emergencies. A resource kit/manual on oil spill procedures is being prepared.

town of Dwellingup. This followed the closure of the town's only sawmill in May - the 23 left unemployed were offered temporary contract work by CALM while negotiations to open the new mills continued.

## August

*DESERTDREAMING* was launched on Barrow Island. This is an ambitious project sponsored by WAPET to reintroduce mammals now extinct from most of the Australian mainland to one of

for taking protected and threatened species.

The State's first marine park sanctuary zones and a fisheries management plan were put in place at Ningaloo Marine Park. The different use zones were an important part of the park's management plan, approved in 1989 after four years of public consultation.

Woodworks, an art and technology festival, was held at Curtin University. Sponsored by CALM, the festival featured plays, a technical symposium and displays.

## October

THE Department's new Swan Region was formed, amalgamating the former Metropolitan and Northern Forest regions.

## November

THE draft management plan for Matilda Bay Reserve was launched, with an invitation to the public to make submissions before the closing date of 10 January, 1992.

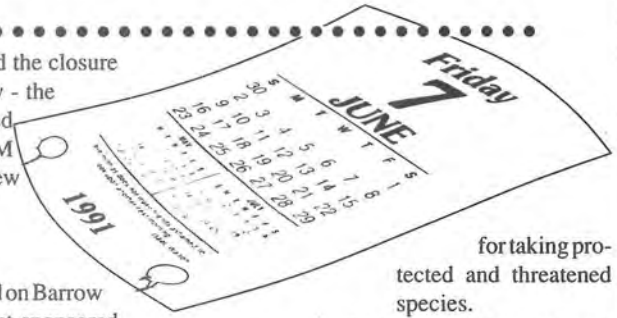
Plans to create a new national park in the Kimberley and to extend existing ones were announced.

## December

A 10-YEAR plan was announced that would see Indian sandalwood plantations being developed in the Ord River irrigation area and a reduction in harvesting of native sandalwood, while maintaining a viable export industry.

A study into the suitability of the Nullarbor Plain for World Heritage Listing was announced following negotiations between State governments of Western Australia, South Australia and the Commonwealth.

Two pastoral leases, Madura by and Mundrabilla were included in the WA study area. Both have significant caves and other features. ■



CALM's Manjimup nursery was contracted to grow 350 000 *Eucalyptus globulus* seedlings for South Australia - the State which has traditionally run the country's biggest plantation program.

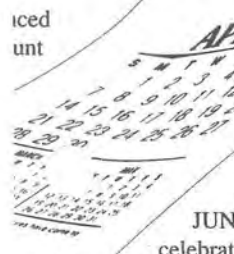
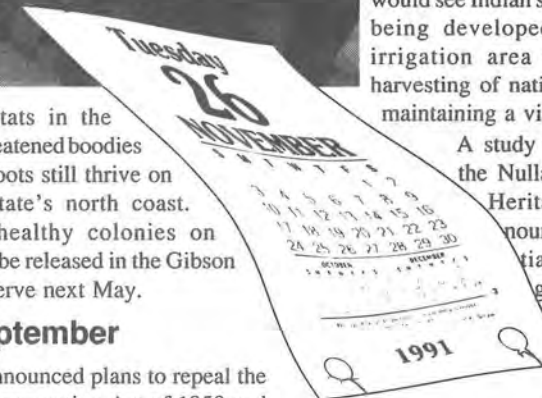
The Fitzgerald River National Park Management Plan was launched by Environment Minister, Bob Pearce. The Plan includes recommendations to close the areas around three peaks in the park to the public to reduce the spread of dieback.

The sawmilling industry was given a new lease of life with the announcement that two new mills would soon be operating in the timber

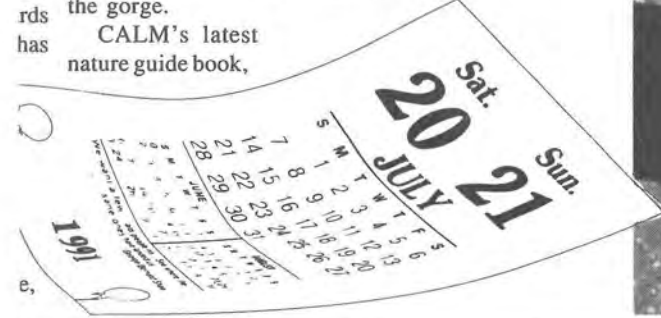
their former habitats in the Gibson Desert. Threatened boodies and golden bandicoots still thrive on islands off the State's north coast. Mammals from healthy colonies on Barrow Island will be released in the Gibson Desert Nature Reserve next May.

## September

THE Premier announced plans to repeal the State's Wildlife Conservation Act of 1950 and replace it with improved legislation. The new legislation will include habitat protection for the first time, as well as increasing the penalties



ion in Mt the rds has





**Letter to CALM:**

On behalf of the Conservation Council I wish to congratulate the Lands and Forest Commission and the Department of Conservation and Land Management for last Friday's excellent workshop.

The subject of the workshop is very topical, and having speakers from a variety of organisations to put their points of view on that subject made the workshop particularly informative and useful.

The wide range of interests represented by the participants added greatly to the value of the ensuing discussions, from which everyone must have gained a lot. I certainly did.

Of the LFC/CALM seminars/workshops I have attended since they began last year, and I believe I have missed only two, this was far and away the most successful, and I hope that the format will be continued for all future seminars/workshops.

The practice now adopted of forwarding cop-

ies of the proceedings to participants is also very commendable and much appreciated.

I trust that it too will be continued.

Once again I express my congratulations and thanks to the LFC and to CALM for this workshop and I ask that you convey my appreciation to all departmental officers who assisted in the organisation and conduct of the event.

Yours sincerely,  
(Dr) Beth Schultz  
Vice-President

**THE next letter followed one of our 'Wild Weekend with CALM' courses, run in conjunction with the University of WA. CALM staff run the weekends in Spring and in Autumn on a voluntary basis. Part of the modest fee required of participants goes to the UWA to defray costs and the rest goes to CALM's Perup Ecology Research Centre.**

**To: Dr Per Christensen**

Dear Per,

A quick note to express my appreciation of the time, effort and enthusiasm that both Tub (Graham) Liddelow and yourself put into the program last weekend with University Extension.

It certainly opened my eyes greatly and has yet again stimulated my enjoyment of the bush and its fauna and flora. The overall program was tremendous in both an educational and social way, and I've no doubt that the public's understanding of CALM's operations and objectives can only be significantly enhanced by such programs.

My two sons (10 & 6) are most eager to get out camping again soon and I am looking forward to sharing with them the knowledge I picked up from last weekend.

I hope your own research and development work with the State's fauna continues successfully and I hope our paths will cross again some time in the future.

Many thanks once again to Tub and yourself.

Sincerely,

Tom Porter  
Executive Director  
Howard Porter (1936) Pty Ltd.

**From the Scarborough District Primary Extension and Challenge To Ms Fiona Marr CALM Community Education Officer**

Dear Ms Marr,

On behalf of the Scarborough District PEAC program I would like to express thanks for your valuable assistance, by way of venue and resources, to the learning programs offered by Kate Coughlan and Stephen Sunderland in the second

term.

The students benefited enormously by using the different venues; they added relevance and interest to the program.

George Halleen  
Superintendent  
Scarborough District Education Office

**To Mr Bob Pearce Minister for the Environment**

Dear Sir,

We have just completed planting 16 ha of trees on our farm under the CALM timber belt share farming scheme.

Our family has been planting over 5 000 trees for the last 10 years. However, with the downturn in wool we were contemplating

stopping our conservation work for the next 4 - 5 years. Luckily, we were approached by CALM to try the timber belt scheme late in 1990 - for a 1991 planting.

I rate this scheme as the best initiative for large scale soil, water and remnant vegetation conservation that I have come across.

Most farmer are 'closet greenies'. They live with their farm every day of their lives. They hate seeing it blow away, salt encroaching on their paddocks and their remaining bushland slowly dying. Unfortunately, most find it tough under the present conditions to buy trees, fencing materials and pay for site preparation (i.e., ripping and spraying).

This is why I feel that the timber belt sharefarming scheme is such a winner. Farmers

can help by supplying the land and doing a lot of the work, without having to pay the up front costs.

A lot of our trees that we have planted in the past were purely for aesthetics. I feel this new method of growing the trees with some useful end product a very good idea.

The reason for me writing is to compliment the government and CALM for initiating this scheme. There is an enormous groundswell of interest as more and more farmers become aware of the scheme and its benefits and I hope the government can continue to fund this worthwhile scheme,

Yours sincerely,

Richard Clapin  
Hartville Downs  
Cranbrook

## Volunteer NEWS

# Still a long way to go

**FOLLOWING are a few observations and odd snippets of advice from Swan region volunteer Reg Brian-Davis after helping CALM staff with displays and presentations at the Grove Shopping Centre, at Sorrento and with the Hills-Forest program:**

He said his experiences there brought home to him the enormity of the community education and communications task that lay before CALM.

Reg said he was dis-

turbed by the lack of knowledge on quite common Australian fauna and was horrified to hear one visitor say:

"Come and look at this lovely possum ...," (which, in fact, was a wombat of some 35 kg!)

The speaker, he says, was quite serious and later exclaimed that they had never heard of wombats - and no, they were not new arrivals either!

Reg also sees an urgent need for volunteers to take some responsibility for

educating the community.

"It is, I believe, incumbent upon us to learn as much as we can so that we really do assist the officers, rangers and foresters with both style and confidence," he said.

"We should actively encourage questions from the public with whom we come in contact, and give correct answers far more often than we say 'I don't know'.

"An occasional 'don't know' from a volunteer is acceptable, especially in

response to difficult questions - but we shouldn't let it rest there - we should follow up with: 'Will you be here for a little longer? I'll try to get an answer for you'.

"Alternatively, if the question is really complex, with the enquirer intent on an answer then we should follow this line: 'You've asked an excellent question but it may take me a day or two to find the answer - may I have your name and a 'phone number so I can call you?' Then ask your CALM officer or contact for the answer, and then pass it on quickly to your enquirer (with CALM's approval, of course).

You will probably get one of two reactions, or both. The first is surprise and appreciation for your efforts; the second, disbelief that someone kept their word and fulfilled a promise. In any event the enquirer will think both you and CALM are wonderful (and it's great public relations!)

In contrast, the Hills-Forest program presented Reg with a different picture - he discovered that people who paid a sm fee, were there because they wanted to be - to acquire information or further their existing knowledge.

But Reg is the eternal optimist and sees a light at the end of the communications tunnel - children - with whom he was much impressed.

"I assisted forests officer Barry Hooper with a visit to a primary school where grades five and six had set up a nature walk trail, and had initiated flora projects. These children were impressive; they knew their work well; could talk about it cogently and asked reasonable and sensible questions - need I say more?"



'Friends of the Porongurup Range' (from left) Ruth Saxon, John Marwick, Geoff Clarke, Mark Saxon, Lloyd Warnock, John Cluett, Brian Hawkins, Royden Clarke and Ray Willia. Photo by Ann Burchell

## Porongurup Friends

CLEAR skies and a cool breeze were welcomed by the twelve volunteers from the 'Friends of the Porongurup Range' and other Porongurup residents on Sunday November 3, when they rallied to help carry one and a half tonnes of timber to the

by  
Ann Burchell

slippery rockface on Devil's Slide where they helped to construct a bridge.

Neil Scott, the ranger-in-charge of the Porongurup National Park, coordinated the mammoth effort of moving the seven

prefabricated support struts, 140 metres of planking, a portable generator and an assortment of tools to the site, 200 metres up the rockface.

With most of the volunteers making the steep climb six times, everything was moved in the remarkable time of just over one hour, and construction of the bridge was begun.

The bridge was designed not only to make the path across the rockface safer for the many people who climb this peak, but also to lessen their impact upon its fragile environment.

The bridge is the first stage in CALM's plan to upgrade the path to the summit of Devil's Slide, and was the first major project the 'Friends of the Porongurup Range' had volunteered to undertake and for which CALM is most grateful.

## Social notes

**A NUMBER of CALM volunteers have pooled resources (human) to organise a social club so that volunteers from the regions can meet on a social basis to exchange views and experiences.**

To start both the new club and the New Year a picnic is planned for noon on Sunday January 19, 1992 at Matilda Bay Reserve (near the tearooms opposite the University of

Western Australia).

It will be a family affair for volunteers and CALM staff. Barbecues have been hired but please bring your own food and liquid refreshments along with suggestions for further activities throughout the year.

RSVP by January 12, 1992 to: Fran Brown on 448 7808 (evenings only), Blair Robins on 344 6180 (after 3.00 pm) or Melita Whately on 341 7522.





*Haunts of youth revisited. Dr Barry Wilson arrived full circle when he joined CALM and found his office window looked out over Matilda Bay. It was while completing his Ph.D at UWA that he chose this site to study the reproductive cycle of mussels living on pylons.*  
Photo by Verna Costello

# Did you hear the one about...

**DID you hear the one about the racehorse goanna, the chuditch, the hollow log and the chainsaw?**

During the past 12 months Collie District staff led by forest officer Brad Barton have been involved in monitoring numbers of

woylies, chuditches and possums in light of a fox-baiting program in Battaling State Forest.

One of the tasks involves fitting radio transmitter collars to the woylies, chuditches, etc., to keep track of any increase or decrease in their

numbers.

Keith Morris from Research, who was overseeing the program, was in hot pursuit of a chuditch that was fitted with a transmitter when the little 'critter' bolted into a hollow log followed by a large racehorse goanna.

"Oh, no," thought Keith. "It looks as if it's become afternoon smoko for the goanna."

A despondent Keith called the office on his two-way and asked for a chainsaw to open the log, remove the animals and retrieve the collar.

"Some conservation program - it's just cost us a chuditch and a goanna!" he thought.

Not so, he discovered

as the opened log revealed a stand-off between the two, with the chuditch nursing one hell of a headache caused by a close shave with the chainsaw.

The goanna took off like a scalded cat but the chuditch is doing nicely thanks, enjoying a little R & R before being released to tell tall tales to its mates, starting with "Did you hear the one about ..."

Despite this minor setback, the program is proceeding very well with recordings of significant population numbers among woylies, chuditches, possums and bandicoots.

The program has also generated unprecedented community interest.

## Science bible

**OF INTEREST to all CALM scientists are three leaflets produced by the Royal Society of Western Australia, announcing the publication of a new bibliography of scientific achievements in WA:**

- A Bibliography and Index to the Journal of the Royal Society of Western Australia Volumes 1-70 (Supplement to Volume 74, 1991 - expected publication date October 1991);
- Recent Advances in Science in Western Australia;
- Letters to the Editor. (Two new columns for Western Australian scientists in the Journal of the Royal Society of Western Australia, beginning with Volume 75, 1992).

climate and marine life of Western Australia - Proceedings of the Leeuwin Current Symposium, held March 1991. (Volume 74 of the Journal of the Royal Society of Western Australia - expected publication date December 1991);

# Farewell and hello!

**IT WAS almost a case of 'goodbye and hello again' when Director of Nature Conservation Dr Barry Wilson retired at the end of November. Or did he?**

In fact, Dr Wilson, whose six-year contract term expired on November 29, decided to explore the pleasures of retirement rather than seek a further term.

However, he has agreed to continue working on a consultative basis to complete several aspects of the marine parks program.

Dr Wilson was born at Busselton and spent most of his childhood years with his family in Dunsborough, where the earliest stirrings of an interest in marine shells was preceded by an interest in nature as a whole.

"I was one of those horror-children who kept snakes in the rubbish bin and rotten sea shells in the fridge, scaring my mother out of her wits," Dr Wilson said.

"I began serious study later than most - in my twenties - after working in a variety of occupation - as a carpenter in the north-west and a deckhand in Queensland."

Dr Wilson graduated from the University of WA with an Honours degree in zoology in 1960 and was awarded his Ph.D in 1966.

In 1964 he won a Fulbright Travel Award and was appointed Research Fellow in Malacology (the study of molluscs) at Harvard University.

Dr Wilson was appointed Curator of the Department of Molluscs at WA Museum in 1965, and Head of the Division of Natural Science in 1972.

In 1979 he went to Victoria where he took up an appointment as Director of the National Museum, and remained in that post

for five years.

He returned to WA in April, 1985, when he was appointed Director of Nature Conservation with the then newly-formed Department of Conservation and Land Management.

Looking back on his years with CALM, Dr Wilson said that it was easy to lose sight of CALM's many achievements when grappling with the day-to-day issues in all their complexities, and one tends to see only the major tasks that remain to be dealt with.

"But there've been some astonishing achievements, not the least of which is the cohesiveness that's evolved between the people who came into CALM at about the same time I joined.

"They came from widely disparate backgrounds, bringing with them equally diverse perceptions of what conservation was all about.

"It's something of a miracle that what could have been a recipe for conflict has developed into what Chris Haynes has described as a 'distinctive conservation culture' enriched by the variety of the contributions made by these people.

"The most obvious achievement has been the very substantial increase in the conservation estate with the establishment of the marine parks, national parks and nature reserves.

"Another significant breakthrough I've witnessed has been the overcoming of local opposition and the gaining of cooperation of local communities, particularly when establishment of a national or a marine park is first proposed.

"Usually, this is brought about by establishing rapport with the people likely to be affected, listening to

by  
Verna Costello

their concerns, explaining exactly what is proposed and how their wishes might be accommodated, (without compromising sound conservation principles) and enlisting their cooperation in achieving what eventually become mutual goals.

"This has been particularly rewarding for me where I've had direct involvement - the establishment of Ningaloo and Shark Bay Marine Parks, for example.

"It's early days yet, but substantial gains have been made in this regard at Shark Bay and I'm optimistic that we'll see increasing cooperation between CALM and the local community.

"Along similar lines has been the gradual but very significant and mutually beneficial development of positive relationships between CALM and Aboriginal people.

"As for my involvement in the new nature conservation strategy, it has been most satisfying to see how this has developed, largely, out of ideas from the body of the department, rather than exclusively from the top, ideas that reflect a depth and commitment from its many contributors.

"During the early years much of our energies were channelled into land management - and rightly so - we needed to get our own house in order first.

"Somewhat less attention was given to interacting with 'people out there' and dealing with conservation issues on private lands and other

"off-reserve" areas, not because we thought them unimportant but because

we probably sensed that we'd better 'get it right' before we could hope to talk to people and gain their respect and support.

"In more recent years this attention has expanded to encompass these areas, vital to the accomplishment of CALM's goals.

"With shrinking resources, the enormous tasks before us can't be dealt with entirely by CALM. They are community issues and need community solutions.

"Where once, there may have been apathy, there's now a great deal of willingness and a growing commitment among the public to hop in and help get things done.

"And CALM can play a crucial supportive role through its technical expertise.

"Why retire when I'm having so much fun? Well, it's true that I've enjoyed my time with CALM, but I feel a growing need to 'get back among the marine shells'.

"I've always found human relationships satisfying but there's a serene wholesomeness about nature that I miss."

Dr Wilson is an experienced skindiver, underwater photographer and field biologist, and has taken part in several major marine biological expeditions in the Pacific and south-east Asian region. He has written extensively on marine shells and coral reef ecology in Australia and is regarded internationally as a world authority on the subject.

"I'm also working on a major revision of my book, Australian Shells (first published in 1971), with my daughter Carina providing the illustrations." Dr Wilson lives in

Kallaroo with his Russian wife Valentina and has three children from his first marriage.

Apart from Carina, there is another daughter, (Jinni), studying anthropology and a son (Alex), living at Margaret River. Valentina has a married daughter (Alona) and two grandchildren all living in Vladivostok.

Asked if he cherished any other aspirations, Dr Wilson confessed to a long-time empathy with indigenous people, not only Australian Aborigines, but others such as the Polynesian people he met some 20 years ago on Kapingimarangi, a remote Pacific atoll, where he was studying the Crown of Thorns starfish.

"These people are subject to the same rules of ecologically sustainable development as we are, but with much more limited resources available to them.

"The balancing act required of them just to survive is worthy of a closer look, which is what I'd like to do, and later complete a book on my findings.



*Curtin University students share a little of the forest with their appreciative audience.*  
Photo by David Gough

## Mobile office

**QUESTION? When is an office a very small office?**

Answer. When you can fit it all into a briefcase.

And that is exactly what you can do with the mobile office system recently acquired by Corporate Relations Division.

The very latest in compact communications planning and packing is CALM's newest acquisition as it steadily improves its capabilities for responding effectively to all emergencies.

The system consists of

a notebook computer, cellularphone, modem, fax and a portable printer, all contained in a medium-sized rigid briefcase.

The highly portable system will be used by those who coordinate the department's media relations activities during major fires, whale strandings and other emergencies.

For anyone interested, information on the system can be obtained from David Gough, Corporate Relations Division on (09) 389 8644.

## Forest walk for children

**PART of CALM's involvement in Children's Week, held in October, was a joint project with third year social work students from Curtin University.**

The pilot project, which involved CALM people from Mundaring District, was organised by Hills Forest Manager Stev Slavin, and was aimed at increasing the range of groups using the forest. The half-day event involved taking students from two schools for intellectually impaired children on a tour of the forest near Lesley Picnic Area off the Brookton

Highway.

The program began with a talk by Forest Ranger Glenn Willmott on the forest, its animals, and its conservation.

"A walk in the forest should be a stimulus for all our senses," he said. To emphasise this and allow the children to experience the forest fully, a number of stopping points were set up along nearby trails where the children performed various activities.

These included crushing eucalyptus leaves to smell the powerful oils, imitating the call of the kookaburra, and feeling the sharp points of zamia fronds.

The children enjoyed the experience and the five Curtin students, Liz Allison, Rebekah Cant, Jo Laufer, Sushil Singh and Kylie Mawdesley, were all pleased with the outcome.

Glenn Willmott was equally pleased and hoped that the pilot program could be utilised or adapted for the Hills Forest Program to give a wider range of groups the opportunity to experience the pleasures of the bush.

"We need to have a range of programs to cater for all groups. Currently, the forest is really only accessible to those who are fit and healthy," he said.





Park ranger graduates, back row, left to right: Murray Banks, Geoff Harnett, Michael Paxman, Arvid Hogstrom, Ian Hughes, Geoff Passmore, Mark Moore. Front row, left to right: Dave Burton, Scott Godley, Jason Puls, Anne Greig. Missing from the photograph is Mark True. Photo by Verna Costello

# The graduates

by  
Verna Costello

ELEVEN park rangers were presented with graduation certificates by the Minister for the Environment Bob Pearce, at a ceremony at the Matilda Bay Restaurant last month.

Each also received a copy of "Wildflowers of Western Australia" from the Executive Director, Dr Shea.

Seventy CALM staff, parents, relatives and friends attended the ceremony.

The occasion marked the successful completion of training for a total of 12 former trainees.

Each had completed a minimum of two years'

supervised park work as well as academic study and practical training.

Opening the meeting, the Director of National Parks Chris Haynes congratulated the graduates on their dedication and hard work.

Dr Shea reiterated Chris Haynes' remarks, commending them particularly on their academic work.

"For most, this meant correspondence study - a lonely business - usually tackled after a day's work in the bush," Dr Shea said.

Both the graduates and the Department owed a debt of gratitude to the regional and district managers who provided support, and to supervisors and rangers with whom they worked.

"These are the rangers who gained their vast store of knowledge and experience the hard way, by trial and error," he said.

Dr Shea thanked Principal Projects Officer David Greenhill for his work in co-ordinating the program and keeping it running smoothly.

"David was always available to the trainees when they needed advice and an understanding ear," he said.

Dr Shea said the training program was very close to his heart and referred to the Kimberley region where two

Aborigines, Paul Butters and Alex Rogers, were nearing the completion of their traineeship.

Earlier this year they had graduated from TAFE's Katherine College, (NT) where they had completed the academic part of the program.

"I believe Paul and Alex gained a great deal both in confidence and knowledge," Dr Shea said. "And there's much to be learnt from them - about their people and their knowledge of the natural environment."

Before presenting the certificates, the Minister congratulated the graduates, reminding them that this was just the beginning of their education.

Mr Pearce also praised the supervisors, management and TAFE staff for their support and assistance.

One of the graduates, Arvid Hogstrom, responded on behalf of his colleagues.

Appearing relaxed and confident, Arvid assured those present that while they had indeed worked hard they were also mindful of the efforts of Departmental and TAFE staff.

He drew particular attention to payroll officer Vern Willimott, who had been exceptionally helpful - always willing to advise and attend to the last detail.

He also thanked David Greenhill and mentioned frequent phone calls during

the training years. Arvid spoke of the diverse backgrounds from which the graduates had come to undertake the course.

"I was a jackaroo, one was an elephant keeper, another a weatherman at Exmouth, another a geologist and several others were students," Arvid said.

"But all of us have a deep love of the bush and enjoy being in the bush which probably explains why, in spite of our different backgrounds and the rare times we meet, we get along so well."

Arvid went on to describe some of the difficulties encountered during their training.

"Those located in the more remote regions had a harder time.

"Once, a trainee had to make an 800 km round trip just to sit one exam."

"But we all agree it's been well worthwhile."

The idea of providing a training program of this kind for park rangers began soon after CALM's inception in 1985 and received an additional boost with the rangers' wage case two years later. An interest in further training expressed by the rangers in an early survey coincided with the management's aspirations for the new Department.

The rangers' structure needed to mesh with the overall Department framework. Further, there was a call for an expanded role for parks and their staff.

## Another Forest Affair

ENCOURAGED by their initial success, Mundaring District recently organised its second "Forest Affair".

The day of activities was based in and near Jacoby Park opposite the district office, and formed part of the "Go Bush" program.

The Forest Affair included exhibits from groups interested in wildflowers, local history, wildlife rehabilitation as well as honey, water and timber production.

Logging equipment covering an historical

by  
Grahame  
Rowland

range from Clydesdale horses to Kenworth trucks was featured along with wetland displays, a spotter aircraft, native animals, and a bush band to accompany the lunchtime barbecue. In addition, the beauty of the forest was re-created in wood and on canvas by local artists, sculptors and wood-turners.

Mundaring senior forester Bill Adams said that although numbers were slightly down, he believed

this could be attributed to other coinciding events and the possibility that the initial Forest Affair, which was held only a few months ago, was enjoyed as something of a novelty.

"The people who came this time were new - everybody said they enjoyed it and got something out of it," Bill said.

"The main aim of the exercise was community involvement.

"The idea of using community and volunteer groups was to demonstrate to the public the tremendous cooperation we get from these organisations which are involved in a whole range of activities, and without whom we

couldn't operate nearly so well.

"It also gave the groups an opportunity to show their equipment and expertise to the wider public.

"There was also a great spirit of cooperation within the department.

"We had people involved from the Swan Region, Head Office, Woodvale, and Jarrahdale and Perth districts.

"And at Mundaring, the forest workmen showed a great deal of enthusiasm.

"Some staff even came in from their holidays to help out, and two people camped overnight in Jacoby Park, to act as security guards for the displays and equipment.



## Not quite a total disaster

THE Sanko Harvest oil spill left its mark on Cape Le Grand National Park, claimed the lives of fur seals and sea birds and will not be easily forgotten by Esperance District staff and other South Coast Regional staff.

But there have been good things to come out of the incident. Research data, that probably would not otherwise have been available on wildlife in the Recherche Archipelago, was collected and some ongoing research made possible; and both CALM and the Department of Marine and Harbours were better prepared when the Kirki spill came along just months later. Using the Sanko Harvest as a case study, a CALM resource kit/manual on oil spill response is being prepared for staff training and for

use in an emergency.

But it doesn't end there. The Sanko Harvest ran aground on Saint Valentine's Day. Eight and a half months later, two people who went to Esperance to work for CALM have announced their engagement and they intend to marry in Esperance in late 1992 - oil spills and other major emergencies allowing.

The two are CALM media liaison officer during the Sanko spill Tanya Maxted, and Police Airwing/Westcoast helicopter pilot Clive Mayo also worked during the Kirki oil spill off Jurien just four months later.

His best man? The Department of Marine and Harbours' pollution combat officer! Her matron of honour? One of the volunteers who helped clean and release the fur seals!

ONE of the most illustrious groups of biologists to meet outside Perth arrived at Tammin for a five-day workshop last month.

Among the 37 participants were 14 biologists from overseas with Sweden, Finland, Norway, Great Britain, Canada and the USA all represented.

Stanford University professor of population studies and biological sciences Paul Ehrlich was one of the best known of the overseas visitors.

Specialising in ecology, human ecology, evolution and behaviour, Professor Ehrlich has published a series of textbooks and several hundred scientific papers in these fields.

In 1989, he received the first Science in the Service of Humankind Prize, awarded by the American Association for the Advancement of Science.

Providing a distinctly local flavour and viewpoint were Jos Chatfield and Don Couper representing local farmers, and Ken Wallace the CALM regional manager for the wheatbelt.

The conference was arranged to discuss the reconstruction of fragmented ecosystems at both a global and regional level. Put

more simply, the aim was to discuss what we knew about managing remnant vegetation, and what this means at both global and local scales.

The conference started at the global scale, and the early papers certainly reminded us that planet earth has a few problems, and that we can't ignore events occurring elsewhere in the biosphere when we manage locally. If we do, we will probably be overtaken by external events.

However, the world consists of many local areas joined together. To solve the problems of the world requires work at a local level.

"Thank goodness!" we all thought. Global is too depressing, let's get to something we can all understand, the local situation.

Unfortunately, people like UWA emeritus professor of zoology Bert Main and Florida ecologist Dan Simberloff didn't let us off the hook and were quick to point out that we were, on the whole a pretty naive bunch, and even some of our new pushes, such as that into reconstructing linkages (corridors) between remnant vegetation areas, had a nega-

by  
Ken Wallace

tive as well as a positive side.

Fortunately, the conference papers were broken by a day touring Tammin farms looking at land degradation issues and solutions, including a session at the Charles Gairdner Nature Reserve at which Bert Main demonstrated once again

his unrivalled grasp of local natural history. About 50 local people joined conference participants for the field trip, and for most overseas visitors this day was a highlight. The opportunity to discuss local issues on the ground with local people was greatly appreciated.

As with all conferences, the opportunity to meet and talk with a diverse group of people, particularly in a live-in situation, resulted

in many useful ideas and the transfer of valuable information. I learnt much from the conference and was surprised at how much we could learn from places such as Norway.

It was also interesting to be reminded again of CALM's low profile in agricultural issues, and the importance of adequately integrating 'academic' research and practical knowledge to successfully manage land.



Pictured with CALM's Wheatbelt Regional Manager Ken Wallace (centre) are visiting biologists Yrjo Haila (left) from Helsinki University, Finland, and Dan Simberloff from Florida State University, USA.