

# CALM NEWS

Print post approved PP665002/00001



DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

FOREST SCIENCE LIBRARY  
DEPARTMENT OF CONSERVATION  
AND LAND MANAGEMENT  
WESTERN AUSTRALIA

SEPTEMBER—OCTOBER 1997



- Stage 1 of recreation assets inventory completed - page 2
- Field Officers' graduation - page 3
- Make your documents jump - page 3



- Silver Award for CALM - page 4
- New scholarships for post-graduate staff - page 4
- The passing of Watty Rhodes - page 5



- Broome Festival a great hit - page 6
- Peer Support Program available to staff - page 6
- New plotting system a time and cost saver - page 7

## Marine Authority officially launched



Marine Parks and Reserves Authority members, from left to right, Dr Barry Wilson (Chairman), Ms Edwina Davies Ward, Mr Ian Finlay, Environment Minister Cheryl Edwardes, Dr Diana Walker, Mr David Hayes, and Mr Angus Horwood. (Missing from photograph is Deputy Chairman Mr Michael Hardy.) Photo by Craig Stewart

### WESTERN Australia's Marine Parks and Reserves Authority is now a reality.

Environment Minister Cheryl Edwardes said the Authority, in which marine conservation reserves would be protected, was one of the central links in the Acts Amendment (Marine Reserves) Act 1997 that came into operation recently.

The new legislation would provide the basis on which to build a comprehensive world-class marine conservation network around the State's 12,500 km coastline.

#### Key roles

Mrs Edwardes said the authority would also have a key role in advising the Minister, developing policies on conservation and management of marine fauna and flora, and marine and estuarine environments.

It will oversee the development of reserve management plans, and monitor the implementation of the management

plans and the management of marine conservation reserves by CALM.

She said the creation of the new Authority opened the way for more specialised management of the State's marine environment.

"It's a focal point for community interest in marine conservation areas—and their diverse wildlife and habitats—and provides the necessary overview of managing the many uses and benefits available from the marine environment," she said.

The seven members are:

- Dr Barry Wilson, managing director of Murex Consultants and a former Director of Nature Conservation with CALM.
- Michael Hardy, barrister and Chairman of the Abrolhos Islands Management Advisory Committee, who has extensive experience in environmental and planning law.
- David Hayes, executive chairman, Frontier Petrol-

eum NL, who has 31 years experience in the international petroleum exploration and production industry.

- Dr Diana Walker, Associate Professor, University of WA, an expert on seagrasses and marine ecology and deputy head of the University's Botany Department.
- Ian Finlay, a former professional fisherman who has been involved in the fishing industry for 34 years.
- Edwina Davies Ward, coordinator of the Marine and Coastal Community Network.
- Angus Horwood, farmer and company director, a former member of the National Parks and Nature Conservation Authority, and a keen recreational fisherman.

Mrs Edwardes said the membership meant that the Authority had a broad range of expertise in using and managing the marine environment.

"I'm particularly pleased Dr Wilson accepted my invitation to chair the new organisation," she said.

"Dr Wilson headed the scientific working group that investigated a representative marine reserve system for Western Australia.

#### Significant document

Its report was one of the most significant marine conservation documents released anywhere in Australia.

"It was the result of seven years' work in which the working group considered the State's 12,500 km of coastline from the Kimberley to Eucla and identified about 70 areas that it recommended be investigated further for their marine conservation values and possible dedication as conservation reserves.

"I'll be asking the Authority to consider areas nominated in the report. Already a community-based group has been set up as part of the process of examining the proposal to cre-

ate a marine conservation reserve in the waters off Jurien."

Mrs Edwardes paid tribute to the members of the National Parks and Nature Conservation Authority who, she said, had done an admirable job in administering the marine parks and nature reserves that had been set aside in the past 12 years.

Dr Wilson said he looked forward to working with his fellow Authority members to ensure the sound management of the State's six existing marine parks and one marine nature reserve, and the future enhancement of the marine conservation reserve system in consultation with the full range of stakeholders.

A Scientific Advisory Committee has also been set up to assist the Authority.

It is chaired by Dr Chris Simpson, manager of CALM's Marine Conservation Branch. Other members are Dr Iva Stejskal from Apache Energy, Dr James Penn from Fisheries

Department; Dr Patrick Berry of WA Museum; Dr Andrew Heyward from the Australian Institute of Marine Science; Dr Louis Evans of Curtin University and Dr Jacqueline Alder from Edith Cowan University.

Mrs Edwardes said other key elements of the Government's marine reserves legislation were:

The adoption of a three-tiered approach to marine conservation reserve categories—Marine Nature Reserves, Marine Parks and Marine Management Areas.

Specific guidelines for access by fishing, aquaculture, pearling and petroleum and mining interests in relation to the various categories of marine conservation reserves and the zones within marine parks.

CALM will continue to be responsible for overall management of marine conservation reserves and will provide the secretariat for the new authority.



As most of you will know by now I will be retiring from my position as a Director towards the end of December and so this will be the last time I write this. It is a good opportunity to reflect a little on a career in land management over a period of more than three decades.

My interest in "nature study" (as it was called then) arose when I was still in primary school and it continued right through school years, but I did not decide to study forestry until just before I left school. Once I saw the prospectus for the course, which included travel to exotic places such as northern New South Wales and Queensland, nothing could hold me back.

My working life began as a forester in the pine plantations of south-east South Australia and then took me to three distinct jobs in the Northern Territory. The second of these was based at Maningrida in Arnhemland, where I had an extraordinary opportunity to meet and become friends with hundreds of Aboriginal people and to learn one of the languages.

This turned out to be a stepping stone to joining the Australian National Parks and Wildlife Service and the establishment of Kakadu National Park, and to the two Director positions I have held in CALM.

Why am I telling you all this? First, because it is an opportunity for me to acknowledge my wonderful and supporting wife, Elizabeth, who has been prepared to live in a lot of very difficult situations, and to remind us all that we should acknowledge the contributions that are made by our partners, if we have them.

Second, although a lot of these jobs might well sound quite glamorous, I can assure you that they were glamorous only in retrospect; all these jobs have had more than their share of routine, tedium and difficulties. Many of you face those same challenges, but we can't remind ourselves often enough of all the positive things that we are able to do in a department like this.

The third reason is that on looking back I have had the chance to do as broad a range of tasks in nature conservation and land management as anyone in our field could hope to do. This has given me an exposure to an extraordinary array of issues, but they all have in common the one thing that we in CALM stand for, that is the principles of good land management and of caring for the resources which we wish to hand on to future generations.

Against all manner of trends in society, fads, fluctuating interest by the community in conservation, changes in technology and the like, our task will always come back to this. It has been said that if you don't stand for something you will fall for anything. If we remember what we stand for we will be well served, and so will the community.

This is not to say we should ignore community opinion, as long as we hear all points of view, not just those who have the loudest voices. Nor should we ignore better ways of doing things. In other words we should remain open minded while holding to our principles.

I would like to take this opportunity to thank you all for sharing parts of your lives with me. In CALM I have come across the best bunch of people I could ever have hoped to meet. When I started as Director of National Parks people at all levels went out of their way to make me feel welcome. This has continued, and I have always appreciated it.

To have worked in CALM is one of the greatest blessings I have been given. Thank you all for making it so.

Chris Haynes  
Director Regional Services

## Recdata a valuable management tool

THANKS to the huge effort of CALM staff across the State, the first stage of the department's Recreation and Tourism Information system (RATIS) is well under way.

This first stage, known as RECDATA, is slowly taking shape as a complete inventory of every recreation asset across the State, whether it be a rubbish bin or a million-dollar visitors' centre.

According to Jim Sharp, CALM's Director of Parks, Recreation, Planning and Tourism, the idea of RECDATA was initially the brainchild of Wanneroo acting district manager Alan Sands and landscape architect and planner Tracy Churchill of Recreation Planning and Design section.

They saw the system as one that is both owned and used by districts, and visualised those officers in the field, who are responsible for the day-to-day management of national parks and other CALM-managed lands and waters, being able to use the recorded data as a valuable management and planning tool.

Tracy and Alan's idea was pushed forward in priority as the result of a request from the Auditor General's office for information on the value of the Department's assets in the field.

The project began late last year with the appointment of Arvid Hogstrom, who was employed to co-ordinate the development of RECDATA.

With valued advice and assistance from Wayne Schmidt, Alan Sands, Tracy Churchill, Karen Shaddock, Regional and District staffs, and a host of other CALM people, a manual was prepared to guide Regions and Districts in their collection of asset information.

Work on this phase of the inventory database



also benefited from the input of Rick Tomlinson from Information Management Branch and the support of Financial Services Branch, in particular Melissa D'Silva, who is responsible for the overall co-ordination of CALM's asset register.

As can be appreciated, the data collection task is enormous in extent, and rangers, recreation officers and other field staff have spent many days, even weeks, shouldering the tedious responsibility of recording such aspects as location, dimensions, values and condition of assets under their control.

This required a huge workload to be added to an already overflowing works program. In order to manage such large amounts of data, the expertise of Steve Rowlands from Como's Information Management Branch was employed to modify a standard Microsoft Access database, so as to make input and subsequent withdrawal of data as simple as possible.

The tedious task of inputting the data as recorded in the field was

handed over to Susan Hunter (pictured above with Mike Bodsworth).

Susan was contracted specifically for the task of entering data relating to more than 700 recreation sites across the State.

Once all data has been put into the system, it will then be fed back to districts via diskettes or paper copy in the interim.

With the development of the department's intra net across the State, it is planned to make the withdrawal and updating of asset information a process that can take place across CALM's expanding computer network.

A majority of districts have completed the initial data collection, and it is recognised that those districts outstanding will be making every effort to complete the data collection in the near future.

Any enquiries about the system, or queries from districts experiencing problems with data collection should not hesitate to contact Matt Sapsworth of CALM's Park Policy and Planning Branch, who is coordinating the ongoing management of RECDATA.

## Get 'networking now!

THERE are still many staff who are not using the internet as an information resource. This is a pity as it can be highly rewarding.

It is largely a case of getting into the habit of 'thinking internet' and probably the best way to do this is to spend, say, 30 minutes a couple of times a week pursuing information on a work-related topic that is of particular interest for you.

Recognising that we learn faster when we are pursuing something that grips our imagination, progressive company CEOs and heads of government departments alike actively encourage their staff to become competent in this way.

The following is an example of the kind of reward that awaits 'net users:

A Corporate Relations editor needed to check the spelling of a place name in the South West.

Within two or three minutes her search led her to a US Navy site, where she

quickly found the information she needed—and uncovered enough material to form a solid base for a LANDSCOPE story.

(You'll have to wait for the story to discover the WA place name's link with the US Navy.)

Of course, you'll also stumble across riveting, albeit largely useless, information like the following, picked up from the Earth's Biggest Bookstore (<http://www.amazon.com>) under its Fun Fact for the Day:

"The earliest English copyright law, enacted in 1709, stated that anyone believing the price of a book to be too high could lodge a complaint with the Archbishop of Canterbury, who could decree that the price be lowered and the publisher fined."

But to make your task ridiculously easy, you can't do better than cruise our own multi-award-winning NatureBase site, which has many time-saving links to other useful and interesting internet sites.

## Staff Movements

### Contract Staff

Sharon Jose to Collie, as Assistant Area Co-ordinator; Rose-Maria Mulvaney to Corporate Relations, Como, as Customer Service Officer; Samir Mehta to Forest Resources, Como as Clerical Officer; Jacki, Baxter to Manjimup, as Visitor Services and Interpretation Officer; Joanne Donnelly to Woodvale, as Clerical Officer; Myles Mulvey to Busselton, as Technical Officer; Bruce Brand to Plantations, Kelmscott, as Forest Assessor; Jodie Dover to Walpole, as Forest Ranger, from Manjimup; Kristion Narducci to Dwellingup, as Field Officer; Kylie Lawrence to Dwellingup, as Ass. Training Officer; Toni-Lou Hoath to Dwellingup, as Assistant Training Officer; Tiffane Bates to Wildlife Branch, as Technical Officer; Anne Smith to Wildlife Branch, as Technical Officer; Cyrus Naseri to Wildlife Branch, as Technical Officer; Gail Brewton to Merredin, as Clerical Officer; Raimond Orifici to Wildlife Branch, as Tech Officer; Jason Pember to Mornington, as Forest Officer; Ben Roberts to Mornington as Field Officer; Adrian Wayne to Manjimup Science and Information as Research Scientist.

### Promotions

Steve Raper to Dwellingup, as District Manager.

### Criteria Progressions

Phil Spencer to Technical Officer, Level 3 at the Herbarium; Richard Harper to Senior Research Scientist, Level 6, at Science and Information Division, Como.

### Secondments

Jacqueline Jewell to Marine and Coastal District, (Fremantle).

### Transfers

Megan Hughes to Kelmscott, as Forest Ranger from Dwellingup

### Resignations

Greg Leaman from Geraldton, as Regional Manager; Susan Hunter from Parks, Policy and Tourism, Como, as Data Entry Operator; Kate Hay from Karratha, as Planning Officer; Marie McDonald from Kelmscott, as Projects Officer.

### CALMNEWS—SEPTEMBER-OCTOBER 1997

Managing Editor: Ron Kawallak

Editor: Verna Costello

Contributing Editors: David Gough, Nigel Higgs and Mitzi Vance

Design and Production: Tiffany Aberin

Published by CALM Corporate Relations Division, Cygnet Hall,  
(cnr) Mounts Bay Road & Hackett Drive, CRAWLEY, Western Australia 6009  
Telephone: (08) 9389 8644 Facsimile: (08) 9389 8296

Story deadline for CALM NEWS is the 10th of the month preceding the month of issue.

Printing by Lamb Print.

PRINTED ON 100% RECYCLED PAPER

## LETTERS . . . LETTERS . . . LETTERS . . . LETTERS . . . LETTERS . . . LETTERS . . . LETTERS . . . LETTERS . . . LETTERS

My friend and I are travelling around Australia and have stayed in several national parks in Western Australia, but so far the best has to be Windjana Gorge.

Here we were privileged to meet one of the best rangers, Mr Bruce Bond. He was friendly, helpful and totally run off his feet. I could not believe that he was doing everything on his own. His

wife keeps the ablutions impeccably clean and receives no remuneration for this, but does it to help her husband. Apart from his duties, which take up at least 12 hours a day, he still made time to make sure we campers were happy and had all we needed.

I'm sure if you would take the time to see for yourself just what is involved in this particular

area you would have to agree it is too much for one ranger. I have had no hesitation in recommending to other travellers we have met to go and stay there — it's the best!

Sincerely,  
Trish George and Honey Hendriks  
Albany, WA

I would like to relate to you an unfortunate incident that I, and several of

my friends, experienced recently upon returning from a walk on the newly opened coastal plain track near Yanchep.

As we had only two days available for walking, we decided to start the walk on Friday evening after work and do the section between Moitch Hut and Yanchep. We left one car at Yanchep and parked the other two cars at the end of Wandoo Road,

Pinjar, then proceeded to walk the track from east to west. Wandoo Road is the closest car access point to Moitch Hut.

We had a fabulous walk, but on the Sunday afternoon, when we returned to pick up the cars that were parked at Wandoo Road, we found that vandals had burnt both our vehicles. Nothing was salvageable.

Fortunately, both vehicles

were insured, but the incident still caused a great deal of inconvenience and a sense of loss.

In hindsight, I realise that it was probably naive of us to leave the cars in the vicinity of Gngara Pine Plantation, but I was not familiar with the risks that this area posed.

To avoid a repeat of this incidence occurring to other walkers, I would appreciate it if you could

publicise our story in CALM NEWS or possibly even LANDSCOPE. Ideally, I would like to see a sticker affixed to the Track Notes pamphlet advising walkers of the potential dangers of parking their cars in this area. I have already notified the ranger-in-charge at Yanchep.

Sincerely,  
Martin van Bueren  
South Perth

# Graduating Field Officers



Graduates, standing left to right, Ben Tannock, Keith Woodward, Greg Evans, Robert Turner, Stuart Harrison, Stephen King, Matt Dowling, Brett Fitzgerald and John Marshall. Seated left to right, David Guille, Rebecca Wolstenholme, Environment Minister Cheryl Edwardes, CALM Executive Director Dr Syd Shea, and senior training officer Alan Byrne. Photo by Paul Webster.

**THIRTEEN field officers with CALM were presented with graduation certificates by Environment and Employment and Training Minister Cheryl Edwardes at a ceremony in Bunbury recently.**

The certificates mark the successful completion of a 14-week CALM training course the officers undertook in stages over the past two years.

Mrs Edwardes said the officers had been chosen following a rigorous selection process.

The initial advertisement in January 1995 attracted more

than 200 applicants of whom 45 were interviewed. The top 20 were invited to attend a five-day residential selection-school at Dwellingup.

The final selection narrowed the field to 15, two of whom subsequently resigned.

Mrs Edwardes said the program focused on competency-based training and was accredited with the State Training Board of Western Australia.

She said the program reflected the Government's recognition of the need to invest in its workforce.

The Minister also presented the Keynes Memorial Award

for the most outstanding field officer recruit for 1996 to Brett Fitzgerald, who is currently based at Kirup in CALM's Blackwood District.

Brett has a Bachelor of Science degree in Environmental Biology from Curtin University. He has continued his tertiary studies on a part-time basis to complete his honours project on the effects of thinning and fertiliser on jarrah stands.

This work is being carried out with assistance from CALM's Science and Information Division team in Dwellingup.

Brett's current duties at

Kirup focus on the district's nature conservation program. As well, he helps the State Forest Resources Business Unit with tree marking and in fire management.

The CALM Executive Director's Merit Award for the trainee who displays the best all round performance in both theoretical and practical areas was presented to David Guille.

David has a Bachelor of Applied Science (Environmental Management) degree from Edith Cowan University.

He was recently offered a position as assistant area co-ordinator for CALM's

Maritime Pine Sharefarms Group.

His main duties in this area are liaison between CALM and private landowners with the view to extending plantations on their land.

The Executive Director's Scholarship, made available to all CALM's AWU staff to help them financially in their post-secondary education studies to enter field officer positions throughout the State, was presented to Melfyn Price of CALM's Perth district and Gary Davidson of Mornington district.

The Executive Director's Scholarship, available to all

staff who have an undergraduate qualification, was awarded to Justine Edwards who is currently employed as a contract research scientist with CALM's Science and Information Division in Busselton.

Justine's proposed post-graduate study is into water relations of maritime pine and native species in low to medium rainfall zones of Western Australia.

This year, the post-graduate scholarship has been named in honour of the late Dr George Malajczuk who had a distinguished career with both the Forests Department and CALM. (See page 4)

## How to make your documents jump with PDF

ONE of the newest developments on CALMweb is the gradual introduction of Portable Document Format files, more widely known as PDF files.

So what are PDF files? Created by using an inexpensive software package called Adobe Acrobat, they can be viewed or printed by anyone who has downloaded the free viewer, regardless of whether or not they have the software in which the file was originally produced.

For example, you can view and print a word-processing document such as Word Perfect, or a desktop publishing document such as Pagemaker or Quark Express, even if you don't have that software. What is more, you

by David Gough

view the document exactly as it was, or will be printed.

To see an example of a PDF in action, look at the Index of Key Documents section on CALMweb, that Grace Silvestro has been converting over the past month, and select either the CALM Policy Statements or CALM Circulars.

The Index for either of these points to the relevant documents, but to go to the next step you need to have the Adobe Acrobat Viewer downloaded and installed. To speed up the process, the latest copies have been placed on the CALM server.

Once armed with the

installed viewer, you can see the documents in exactly the same form as the original, and if you need a copy you can print all of it, or just the page you need.

Now the possibilities are endless; PDF's can be made for all of CALM's administrative documents. They can then be 'distributed' via CALMweb, where they can be read and printed if a hard copy is needed.

They also remain on the system rather than being binned.

Updating the document is as simple as making the changes in the word processor or desk-top publishing package originally used, and saving it as a PDF, which is then uploaded to CALMweb. The new version of the

document is immediately available.

Forms can also be distributed and filled in on screen, then printed off or sent back (the latter is still in development).

Newsletters such as *Risky Times* (<http://calmweb.calm.wa.gov.au/drb/csd/hrb/Riskytimes.html>) can be displayed in their finished form and read on screen, which cuts down paper usage and distribution costs.

Of course, the biggest problem with this is persuading people to 'check the web first', to make CALMweb the first port of call for posting information and for looking for it.

Not an easy task, but as more people become connected and more 'paperwork' is converted to PDF,

it could very quickly become the norm.

As an experiment, we have put up this page of CALM NEWS on CALMweb as a PDF file. Why not have a look at it now, then browse *Bookshelf* in the CALMweb Guide. (You can finish reading the rest of CALM NEWS afterwards.)

Note: If you see a need for presenting your Division/Region/District/Branch's information in this way, contact David Gough at Corporate Relations on (08) 9389 8644 for details on Adobe Acrobat. If you wish to buy a copy, contact John Dakin at the Helpdesk (08) 9334 0334.

Right: Communications officer (and 'web master') David Gough. Photo by Verna Costello.





Steve Jones, left, and Gary Olley. Photo by Verna Costello

## CALM wins silver award for Metadata collection

AT a recent meeting of the WA Land Information System Council (WALIS), CALM was presented with a Silver Award for the quality of its 'metadata' collection.

Metadata is essentially information that describes data sets, so that others may make use of that data; it specifies such things as date, how the data was collected, by whom, its accuracy, its format, the categories depicted, the coverage and so on.

The particular type of data for which CALM received the award was spatial (or land-related) data.

An Australasia-wide stan-

dard for specifying land-related metadata, known as the ANZLIC Standard, has been adopted by all the State government agencies that make up the WALIS community, and CALM's corporate land-related data has now been documented according to this standard.

The metadata project as a whole will make the exchange and sharing of land-related data among government agencies much easier, yet more secure in future.

CALM metadata was compiled by staff in Information Management Branch, Science and Information Division, and Forest Management Branch,

and the task was co-ordinated by Gary Olley and Steve Jones of the Geographic Information System section of Information Management Branch.

With the metadata in place, it can now be interrogated with a new tool, available to all the WALIS community, and appropriately known as 'INTERRAGATOR'.

The award was accepted on behalf of CALM by Rick Tomlinson of Information Management Branch. The Gold Award went to the Water and Rivers Commission, but given the complexity and extent of CALM's spatial data, the Silver Award is a notable achievement.

## Scholarships honour two illustrious CALM men

TWO scholarships honouring the personal attributes and significant contributions to CALM by the late George Malajczuk and Seamus Mulholland are now open to staff with post-graduate qualifications.

Both men passed away in January 1997, George after a 12-month battle with cancer, and Seamus after a boating accident.

They left many staff

mourning their loss, not only for their work-related contributions, but also for their outstanding personal qualities.

**The Dr George Malajczuk Post-Graduate Scholarship:** George had a distinguished career with both the Forests Department and CALM.

His Doctorate in applied mathematical programming techniques, relating to plantation planning, set the standard

for many later developments in this field.

George was the technical excellence underpinning many of CALM's initiatives, and it is this technical excellence that is to be fostered and nurtured with the scholarship.

The scholarship replaces the Executive Director's Post-Graduate Scholarship and is designed to provide continuing education opportunities in a range of science disciplines; it

has a monetary value of up to \$20,000.

**The Seamus Mulholland Post-Graduate Scholarship:** Seamus, at the relatively young age of 32, was a brilliant economist and was heading the important plantation strategy aimed at fighting the State's salinity problem.

He was a well-respected leader who demonstrated a delicate balance of courage, wisdom and integrity, and it is this

leadership quality that is to be fostered and nurtured with the scholarship.

The scholarship is designed to provide continuing education opportunities in a range of management and leadership disciplines and has a monetary value of up to \$20,000.

Candidates can either enrol in post-graduate studies or in executive development programs that are approved by the Executive Director.

Before applying for a scholarship, candidates should refer to the CALMweb site under Index of Key Documents for the 1991 CALM Policy Statement number 36 - Post graduate studies and study grants.

Further information can also be obtained from senior training officer Alan Byrne by phoning him on (08) 9538 1200 or (08) 9538 1403 or fax (08) 9538 1244.

## CALM volunteers rediscover rare plant at Bruce Rock

THE rare plant *Symonanthus bancroftii*, named in honour of Dr. Joseph Bancroft (1836-1894), a Brisbane pharmacologist, has been found again thanks to the help of a dedicated group of CALM volunteers, Wildflower Society members and other Bruce Rock volunteers.

Classified in the same family as the potato, capsicum and petunia, this species is one of only two members of the genus, both native to Western Australia.

Its closest relative *S. aromaticus* occurs in the eastern Wheatbelt and the Goldfields.

Both species have separate male and female plants, and are aromatic, emitting a tobacco-like fragrance, especially when plant material has been dried for a period.

When he was contracted to help draft the Narrogin District Rare Flora Management Plan, former CALM employee Rob Buehrig (now retired) attempted to locate *S. bancroftii* from information on old Herbarium collections dating back to 1892.

### Vague information

Among the problems encountered was the vague information about the plant's location on the pressed samples.

One sample collected in 1932 by Bruce Rock local identity Eric Bailey, was labelled 'Bruce Rock'. Since then much of the

by Greg Durell

remnant bush has been cleared, making the plant even harder to find.

Nevertheless, Rob doggedly spent many hours on many field trips into the area, trying to discover in what habitat the plant may have occurred.

Earlier this year, the plant's importance was brought to the attention of Bruce Rock Land Care Co-ordinator Jeanette Buegge of the Bruce Rock Land Conservation District Committee (LCDC), who took up the challenge to help find it again.

### Grant

The LCDC successfully applied for a small grant from the Gordon Reid Foundation and, with the help of Jeanette and CALM, Rob completed a desktop study of the plant's historical records.

He then compiled a report suggesting possible places to search.

The next phase of the project was to raise community awareness of the rare plant and the search for it, by contacting the local radio station and newspapers and distributing posters around the community.

As a result, a group of local and CALM flora volunteers were enticed to spend a weekend in Bruce Rock, looking for the plant during the main September flowering period.

Fortunately, two weeks

before the weekend search Corrigin Land Care co-ordinator Robyn Campbell discovered a piece of a 'different-looking shrub' and promptly showed it to Jeanette who felt reasonably certain it was *S. bancroftii*.

A speedy reply from the W.A. Herbarium, where the specimen was sent, confirmed the fact.

The first collection of the plant in 35 years had been made, albeit with only one plant.

This find greatly helped the search weekend in September, which was a great success and well co-ordinated, thanks to Jeanette and Michael Buegge.

About 35 volunteers attended and searched at four 'hot spots', using the specimen as a guide.

The main flowering period, previously thought to be September, was over as most of the flowers had fallen in the short time since its discovery.

This hampered the success of the search to some extent and any future searches will be held earlier in the year.

The search weekend, however, was not entirely wasted.

### Awareness raised

It increased awareness of the plant's rare status for local people, who are even more keen to find more plants, it provided a forum for people with like interests, and it introduced people living outside Bruce Rock to local issues.



Rob Buehrig and Robyn Campbell kneel beside their 'find' *Symonanthus bancroftii*, while an unidentified volunteer takes a closer look. Photo by Greg Durell

## CALM Peer Support Team Contact Details

From foot of page 6

Name	Section	Telephone	Name	Section	Telephone
Tom Wood	Risk Management	(08) 9334 0396	Scott Wood	Harvey	(08) 9729 1505
Linda Gilbert	Risk Management	(08) 9334 0397	Frank Colyer	Collie	(08) 9734 1988
John Ireland	Risk Management	(08) 9334 0219	Bruce Withnell	Harvey	(08) 9729 1505
Leon Griffiths	Perth	(08) 9405 0707	Brian Moss	Manjimup	(08) 9771 7908
Annie Greig	Perth	(08) 9405 0719	Bob Hagan	Manjimup	(08) 9771 7935
Bruce Telfer	Mundaring	(08) 9295 1955	Peter Masters	Walpole	(08) 9840 1027
Alan Wright	Jarrahdale	(08) 9525 5177	Jeff Bennett	Pemberton	(08) 9776 1207
Taryn Linning	Dwellingup	(08) 9538 1078			



## Collected data proves vital

NEARLY 50 topics that are important to data collection on visitors to national parks and reserves were raised in the brainstorming session that launched a recent VISTAT Workshop.

The workshop was held at the Como Training Centre and was the first in nearly 10 years, and attracted 23 participants from six regions.

While VISTAT had a humble start, it has made enormous progress and, according to CALM Executive Director Dr Syd Shea, is considered throughout Australasia as one of the leading programs in its field.

The task of collecting visitor data might appear to be mundane, but it is vital to effective park and reserve management, from the perspective of giving visitors what they want, and at the same time protecting the very environment they have come to see.

The aims of the workshop were to:

- exchange information between regions
- determine the priority of VISTAT issues of concern to regions
- discuss these priority issues
- suggest future directions.

Addressing these aims, participants voted on the topics raised at the brainstorming session to determine their priority, and the following were presented for further in-depth discussion:

1. Social surveys
2. Standardisation of data collection methods
3. Impact of visits on the environment
4. Staff training, and equipment.

Park Policy and Tourism manager Jim Williamson was the facilitator who organised the brainstorming session, while the responsibility for the overall co-ordination of the workshop fell to research sci-

entist Luisa Liddicoat.

Luisa said the enthusiasm of those taking part was encouraging.

"It soon became obvious they were all well aware of the fact that they are at the cutting edge of the still-new era of eco-tourism, and they're not going to be caught napping," Luisa said.

"And if the thoroughness that they applied to thrashing out every conceivable facet of each topic is anything to go by, eco-tourism as practised by these dedicated CALM staff members is in safe hands.

"All in all, it was a highly productive day, with those taking part keen to take on board many of the issues raised and tackle them over the next 12 months; it's intended to hold another workshop around that time to review the progress made and decide what further steps need to be taken to maintain CALM's high standard of eco-tourism.

## Sun sets on a century

THE sun set on a century of forest stewardship recently with the passing of Walter 'Watty' Rhodes.

Watty (pictured right, shortly before his death, with son Barry, centre, and grandson Wayne), began work with the then Forests Department at Mundaring in 1935 and notched up 42 years and nine months service.

Barry Rhodes also has been with the Department and CALM for 42 years. Wayne's contribution of 14 years brought up the century for the three generations of Rhodes in August this year.

Over his 42 years of service, Watty had only two lost time accidents. One of them could have been fatal when he sliced

off three toes while employed on firewood cutting. He was out of action for 11 weeks.

In 1971, a '44-gallon drum' rolled on to his foot, the same foot he had injured 36 years previously.

A file note Barry found in Mundaring District Office said that in addition to Watty's outstanding safety record, he had more than 1500 hours of sick leave credited to him.

Watty's career in the forests around Mundaring was remarkable. He was a faller, cutting cord wood for the Goldfields water supply pumps; later, he was to drive along the forest tracks to the various timber-cutter camps where he acted as paymaster.

Young foresters who worked

at Mundaring looked up to Watty as the best sort of Australian bushman—hard-working, honest as the day was long, loyal and a good mate.

He was a remarkable cricketer; even at the age of 50 Watty was still sending them down on the Mundaring pitch which is now the District airstrip. Barry still has Watty's red Forestry Cricket Club cap which he wore when he was captain.

"He was a great bloke," Barry said. "The best dad a man could have."

CALM Executive Director Syd Shea paid tribute to Watty and passed on CALM's condolences to Mrs Rhodes, Barry and his wife Betty and their children and grandchildren.



Jim Williamson, Annie Greig and Luisa Liddicoat look pleased with the topics listed for discussion at the VISTAT Workshop. Photo by Verna Costello



## New phytophthora strain found

CALM's Vegetation Health Service (VHS) has identified a species of *Phytophthora* collected near the South West town of Nannup and never before recorded in Western Australia.

It is the 16th species of *Phytophthora* recorded in the State and was among soil samples sent in to the VHS by CALM's Margaret River hardwood forest ranger Mike Wright for routine testing.

Carrying out the test, laboratory staff Nola D'Souza and Janet Webster found a subculture that was not a species regularly encountered in samples from natural vegetation.

The most common species in the South West of WA are *P. cinnamomi*, *P. citricola*, *P. cryptogea*, *P. drechsleri* and *P.*

by Francis Tay

*megasperma*. Traditional key charts and the electronic *Phytophthora* identification key INTKEY (established by CALM's Nicholas Lander and Helen Coleman) were used to identify the species, tentatively, as *P. boehmeriae*.

The culture was then sent to Centraalbureau Voor Schimmelcultures at the Institute of the Royal Netherlands Academy of Arts and Sciences, where it was confirmed as *P. boehmeriae*.

*P. boehmeriae* is known to occur in Taiwan, Japan, China, Greece and Argentina.

It is generally agreed that all *Phytophthora* species have been introduced into Australia fol-

lowing European settlement.

In Australia, *P. boehmeriae* was first reported in Queensland in 1962, where it was associated with deaths of *Pinus patula*.

It was later reported in New South Wales in 1976, where it was associated with deaths of *Eucalyptus pilularis*.

The WA fungus was similarly associated with the death of a *Persoonia longifolia*.

In all cases, however, tests failed to establish conclusively that death was caused by the fungus.

Workman's Pool, where Mike Wright collected the soil sample containing the fungus, is in St John's Conservation Park. It is near the site of the Barrabup Mill, which was operational between 1908 and 1925.

The site has a plantation of eastern states *Acacia* species, which may be the source of introduction for the fungus.

It is possible, therefore, that *Phytophthora boehmeriae* has been in Western Australia for many decades.

The VHS has submitted a short paper to the Australasian Plant Pathology Society journal, which is now being reviewed.

A culture of the fungus has been retained in the VHS culture collection, and has also been lodged at the Centraalbureau Voor Schimmelcultures in the Netherlands.

Left: Janet Webster and Francis Tay with Nola D'Souza (seated). Photo by Verna Costello



Cheryl Burke and Phil Forsyth are unfazed by this giant feral 'tom'. Photo by Debra Burke

## West Kimberley a clear winner

**SHINJU Matsuri is Broome's famous Festival of the Pearl, an annual highlight of the Kimberley community calendar and now in its 28th year.**

This year's Shinju Float Parade was the biggest ever, with 52 floats.

The parade always features Sammy the Dragon, drummers, street performers, masked children, giant puppets—and more—in celebration of the town's multicultural history, community spirit, pride and humour.

The parade starts near the Shire library, winds through Chinatown, past a judging panel on the Carnarvon Street roundabout, and finishes on the Town Oval.

### Something big

For weeks, 'broome-ours' circulated the town that CALM was preparing something big for this year's Shinju Float Parade—and indeed it was!

Supported by an Arts WA grant, District manager Allen Grosse commissioned local artists Gwen Knox and Naomi Dann to construct, with the help of volunteers, one giant life-

by Tim Willing

like bilby and one giant feral cat.

"From basic drawings, skeleton frameworks of pliable cane steadily grew in stature in the old nursery building," said Allen

Thousands of newspapers later, the papier-mache bilby and cat had taut 'skins' ready for final painting.

### Long hours

Artists and volunteers worked long hours into the evenings, to ensure an unmovable deadline could be met.

Starting 39th in a sea of vehicle-mounted floats, CALM West Kimberley District's essential theme was feral cats and the danger they pose to the survival of bilbies and other wildlife.

CALM's display was headed by a Toyota utility, driven by Derby ranger-in-charge Ian Solomon, and decked out with *Western Shield* balloons and giant feral cat cartoons, courtesy of Environment Australia and the Department of Natural Resources and

Environment, Victoria.

From the vehicle, lollies, balloons and bilby stickers were distributed to children in the passing crowd by a team with a remarkable resemblance to CALM spouses (Eve Solomon and Alison Spencer), CALM-Rubibi's Aboriginal ranger Mary Councillor and the District manager's daughter Sarah Grosse.

Dancing behind the vehicle were performing artists Bobbie Anderson and Sassa Middleton in lizard suits, leaping wildlife carer Haidi Kotai in a fetching black cat suit, and young cats Abbie and Dillon Paten.

An improbable 'Dame Edna' character, ably played by Cheryl Burke, complete with stuffed cat, caused mixed crowd reactions.

### And Basil came too!

Mingling with the crowd and perspiring freely in the 33-degree heat, was Basil the Bilby (alias Aboriginal artist Naomi Dann), escorted by CALM administrative officer, Debra Burke.

Behind them the giant bilby, carried on bamboo

poles, scuttled through the streets, pursued by a snarling and ferocious giant papier-mache feral cat, also carried on bamboo poles!

Pedestrian transport for the giant bilby and feral cat required no less than a team of ten—all local CALM volunteers, apart from wildlife officer Warwick Roe and myself.

The feral cat was also successful in provoking several unscheduled incidents. One occurred when the cat attempted to pursue Broome jail inmates, who had been temporarily liberated for the duration of the parade.

A further debacle occurred when a dachshund bravely attempted to challenge the giant cat on the Town Oval, much to the amusement of a vast crowd! By this time a few of the 'cat bearers' were feeling a little sore in the shoulders from a long lifting effort.

The Shinju judges rewarded CALM's efforts with a pearl shell trophy for Best Overall Float. Staff were later overwhelmed by well-wishers wishing to be photographed with the feral tom cat.

## Rat baiting successful

by Andrew Burbidge and Fran Stanley

TWO trips were made to the Montebello Islands in 1997 to monitor the success of the major 1996 rat eradication project, in which about 40 CALM staff and volunteers were involved.

The first was from 14 to 18 March, when staff visited Ah Chong, Alpha, Bluebell, Brooke, Campbell, Carnation, Crocus, Delta, Gardenia, Hermite, Kingcup, North West, Primrose, Trimouille and several smaller islands, searching for tracks and other signs of rats.

Small numbers of rats and a number of empty bait stations were located on Primrose and Crocus Islands. Clearly, some bottles on these islands were insufficiently baited during the re-baiting visits in 1996. Both islands were re-baited with new bait stations during the March visit. No sign of rats was seen on any of the other islands.

Staff were transported to and within the islands by the Australian Customs Service Vessel *Andrew Fisher*.

The second trip was from 14 July to 31 July 1997, when lines of Elliott traps were laid in three locations on Alpha; two locations on Bluebell; two locations on Campbell, Carnation and Crocus; in seven locations on Delta, Foxglove, Gardenia and Hermite, in two locations on Kingcup, Marigold and North West, and six locations on the Trimouille Islands.

In addition to searching these islands for rat tracks or fresh scats, searches were also made

of Ah Chong, Brooke, Butter-cup, Ivy, Pansy and several smaller islands. Bait stations laid in 1996 were checked to ensure that they still contained bait.

No rats were trapped and no rat signs were seen on any island. No empty bait stations were found, except on Crocus Island, and these had been replaced in March.

Staff on the second trip were transported to the islands on the Australian Customs Service Vessel *Charles Kingston*.

Transport back to Karratha was by helicopter, courtesy Woodside Petroleum, and by helicopter to Barrow Island and jet to Perth, both courtesy West Australian Petroleum.

A 4.5-metre aluminium dinghy (unofficially dubbed the 'Osprey'), with outboard motor was used to get around the archipelago.

All indications are that Phase I of *Montebello Renewal* has been a success. However, because of the scale of the project and the many islands involved, it will be necessary to conduct additional monitoring trips over the next few years.

There was originally some concern that animals such as ospreys, white-breasted sea eagles and bungarras (*Varanus gouldii*), otherwise known as sand monitors (a species of lizard), may have suffered from eating poisoned rats. However, they were as common or

more common during this visit than in past years. There was also no evidence that native animals were eating the bait remaining after the rats had departed.

Of the two grain-eating birds, bar-shouldered doves were considerably more common than in previous years, and brown quail were also seen on many islands.

New storage was also needed at the hut for the new dinghy and other equipment. Pilbara Region purchased a seatainer for this purpose, but the problem was how to get it to Hermite Island.

Fortunately Woodside Petroleum came to the rescue and offered to deliver it by barge when doing some work in the area. It was delivered by a Mermaid Marine barge with a Bristow 'Puma' helicopter lifting all 2.1 tonnes of it from the barge to its new position near the Hut. They don't do things by halves in the Pilbara!

CALM would like to thank everyone involved in Montebello Renewal so far, especially the volunteers and sponsors, and the Pilbara companies who helped this year.

Without their support, work in this remote area would be very much more difficult and expensive. Our thanks go to West Australian Petroleum, Apache Energy, ACI Plastics Packaging, Crop Care Australasia, Selley's Chemical Company, Australian Customs Service, Pilbara Regiment Australian Army, Woodside Petroleum and Mermaid Marine.

## Did you know . . . . .

that bilbies, which so far as we know, mate only once a year in the wild, are mating twice a year in captivity?

Well, what else is there to do when you're not on the run from predators or having to find food?

Rainfall and the number of daylight hours could be among the factors influencing the bilbies' behaviour, so no blanket statement is possible. In fact, the jury is still out on this.

## Peer Support Program addressing stress problems

**THE Peer Support Program is one in which trained fellow workers provide support for their colleagues, in times of stress or following incidents which may place great strain on their ability to cope.**

This program complements the formal and informal systems which you may already have available to you.

There are a number of organisations in Australia that have peer support programs. Here in Western Australia, peer support programs are operating in the mining industry, offshore petroleum, hospitals, the Fire and Rescue Services and State Emergency Services, to name just a few.

Why do we need peer support at CALM? There are a number of things which can sometimes affect our ability to cope with our work and our lives.

Working with CALM may mean there are times when you are faced with stress, uncertainty and daily hassles.

Often, we are able to deal with these daily challenges. Most of us

by Linda Gilbert

have our own coping strategies, as well as the support of family and friends for dealing with them.

There are some times, however, when our coping strategies are stretched to the limit. For example, if we had a number of problems before driving to work, we are probably less able to deal with a work-related issue.

It is also an unfortunate reality that individuals may face a range or critical incidents in their day to day work.

### Critical Incidents:

- Fire emergencies
- Blockades and protests
- Unpleasant discoveries in the bush
- Hostile and aggressive people
- Accidents (or near misses)
- Difficult client issues
- Natural disasters
- Sudden deaths (family or workmate)
- Incidents travelling to and from work

A number of small incidents may accumulate and cause a reaction.

Sometimes a so-called minor incident may prove to be the 'straw that breaks the camel's back'.

There is evidence to show that stress becomes more manageable when people are given opportunities to talk about their reactions.

There is also evidence that people in stressful occupations are less likely to burn-out when they receive support in their workplace.

The following are some things that people have discussed with peer supporters:

- Recent stressful incident
- Conflicts with colleagues
- Personal issues
- The impact of change
- Community hostility
- Stress caused by others
- Work-related issues
- Disrupted sleep patterns
- Harassment problems

### A peer supporter:

- listens to you
- keeps confidentiality
- approaches you after an incident at work to see if you are OK

- helps you look at options and solutions
- provides practical support
- provides information
- tells you about the availability of other sources of help
- gives you some of their time when you need it, but respects your privacy.

### A Peer Supporter will not:

- dox you in to your supervisor /manager
- provide a counselling service
- be judgmental
- contact a professional without your consent
- make decisions for you without your consent

PACE WA (Programs Assisting Companies and Employees) can provide professional counselling and assistance beyond the immediate support provided by Peer Supporters.

PACE WA Employees Assistance Program is a confidential place for you or your family to turn to for help when you have concerns that may be affecting you at work or at home.

The service is confidential, and you will not have to pay anything for the initial consultations (up to three if need be).

PACE WA has offices in Victoria Park, Midland, Bunbury, Joondalup and Mandurah and provide services throughout the State via a network of fully qualified counsellors.

Call 1800 622 386 (toll free) for PACE WA

PACE WA and CALM have jointly established the Peer Support Program. With the professional experience of PACE WA combined with the network of a caring and supportive Peer Support Team, we aim to be there for all CALM employees and their families in times of need.

You may find it useful to clip the list of Peer Supporters' names and phone numbers on page 4 and pin it up in a prominent position in your section. For further information on the program, or how you can become a peer supporter, contact the one covering your area, or one of the listed Risk Management Section staff.



## Noel off to Boston on a bold venture

**FORMER CALM reserves officer Noel Ryan (centre) made a flying visit to say au revoir to former friends and colleagues in Park Policy and Tourism Branch before setting off for the USA.**

With Noel, (centre) are Chris Marmion, Marjorie Jackson, Burke Stephens, Robert Powell and Luisa Liddicoat.

Noel resigned recently after nearly 20 years service, first with the Forests Department, then moving to CALM when it was formed in 1985.

He has left us to live in

Boston, where he is expanding the private business consultancy he has been quietly building in his off-duty hours over the past four years.

He will be initially involved with the final development and licensing of new product technology for the US fast food industry.

His area of particular interest is intellectual property protection and he has accepted an offer to work with a major US manufacturer in co-ordinating the release of this technology in North America early next year.

Photo by Verna Costello

## Executive Director's Scholarship

**THE Executive Director's Scholarship is made available to all AWU staff to financially assist them in their post-secondary education studies to enter into field officer positions throughout the State.**

### Background

Since the closure of the Field Cadet Training Program in December 1991, AWU personnel had limited opportunities to enter field officer positions. Prior to the closure, the Executive Director would offer one position per year to an AWU staff member to enter the second-year cadetship course at the Dwellingup Field Officer Training Centre. Applicants were interviewed and assessed for suitability to complete both the second year of the two-year cadet program and about four units of the first-year TAFE studies via external studies. In 1996, the scholarship was reintroduced and two AWU staff mem-

bers were successful applicants and are currently studying the Certificate IV in Land Management offered by TAFE.

### Process

The scholarship is again offered for 1997 to allow AWU personnel to enter a range of field officer positions. The process for award of the scholarship is as follows;

- The Executive Director's Scholarship will be advertised annually in October, inviting interested AWU personnel to apply in writing.
- Applicants will be interviewed and assessed via the Australian Council for Educational Research (ACER) aptitude tests to ascertain each applicant's suitability to study at either the certificate or tertiary level.
- The successful applicant is provided with quarterly instalments of \$250 over the four-year TAFE course of

study, or \$333 over the six-year tertiary course of study. That is a total of \$8000 for the tertiary program and \$4000 for the TAFE course. These instalments should adequately cover campus fees, books, stationery, stamps and incidental costs associated with external study, and contribute towards the cost of Higher Education Contribution Scheme (HECS).

- The successful applicant will receive the support of the District/Branch manager in approving five hours per week for study leave during college semesters. Office space and access to a departmental computer will be provided, if available.

For further information on the Executive Director's Scholarship, interested staff should contact senior training officer Alan Byrne, at Dwellingup, on (08) 9538 1200 or fax (08) 9538 1244.

## Crocodile captured

**CALM officers trapped a 3.35-metre saltwater crocodile in the River Farm Road area on the Ord River in late October.**

The Department's East Kimberley District senior operations officer Allan Thomson said the capture of the lively male crocodile, followed the laying of traps in a bid to catch a potentially aggressive crocodile, spotted in the area in the weeks preceding the capture.

"A number of sightings of a large crocodile in the area have been reported with two reports stating that the animal approached people in a dinghy," he said.

"Apparently the crocodile appeared to be exercising territorial behaviour and had surfaced close to the people who were fishing at the time.

"In such circumstances, it was important to remove it from the area before it became too aggressive."

Allan said that although the size of the captured crocodile was about the

same as that of the one sighted earlier, it was impossible to tell for sure if it was the same animal.

"This may not be the same crocodile and people should still be careful when fishing and walking in the area," he said.

"It is important that people in the Ord River Region are aware that this time of year is the breeding season for crocodiles and male crocodiles are susceptible to aggression as they mark out their territory."

Allan also warned that even though a crocodile had been removed from the area, it did not preclude the possibility of another taking its place almost immediately.

"Though this particular individual was removed, any decision to remove further crocodiles will depend on their behaviour and whether they pose any threat to people," he said.

Allan said the 'salties' crocodile captured was in good condition and had been transported to Wyndham Crocodile Farm.

## Staff training outlines rare flora search techniques

**TWENTY-FIVE regional and district staff recently attended a training school in the methods of rare flora searches in the Southern Forest Region.**

The training included cover-

by Russell Smith

age of policies and guidelines, landforms, field search techniques, record-keeping, safety issues, flora habitat and a field

visit to several rare flora sites.

Many of those who attended the school had never previously carried out rare flora searches and it was intended that they gain practical experience as soon as possible.

Ian Wilson from Manjimup District, an expert rare flora searcher, will spend at least a day in the field with each trainee as they undertake their first rare flora search.

Twelve of the trainees are

dieback interpreters and with their background knowledge of the flora and landforms of the South West, they will quickly acquire the skills needed when searching for rare flora.

The trainees will be encouraged to acquire experience in all facets of flora management, which will greatly enhance CALM's ability to meet its rare flora search needs in the southern forests.



## New plotting method a time saver

By Rodney Nowrojee

**IMAGINE being given two-hundred-and-fifty points to plot on a map, measuring by hand between the points to get distances, and dividing them by a number to get yet another number!**

Laborious and time consuming? It certainly is, and until recently this method of plotting is how CALM's Marine Conservation Branch (MCB) measured ocean currents.

Now, the drudgery has been eliminated through a new computerised application, designed in a co-operative project between the MCB and CALM's Geographic Information Services section (GIS).

To monitor ocean currents, MCB staff use drifter drogues, which are similar to underwater box kites that are suspended from a float and released

to flow with prevailing currents.

A number of drogues are released over a designated area, and as they move, their positions are periodically recorded using a Differential Global Positioning System (DGPS).

Recordings are then made on the spot, but before the new GIS computerised system, the plots and calculations were performed in a time-consuming operation back at the office at the end of the monitoring expedition.

This meant that any recording errors or other data problems would not become apparent until all the gear was packed up,

the site vacated and the staff involved were back in Perth—too late to collect more data, especially when expeditions were in locations too remote to make a quick trip back to gather more information.

Originators of the project, oceanographer Nick D'Adamo and GIS Officer Ray Lawrie, both from MCB, contacted me at GIS section to find out if this would be an ideal application of GIS to the ocean-monitoring projects that MCB undertakes.

Now, using a portable Geographical Information System (GIS) package, adapted for the Marine Conservation Branch by GIS Section, the data can be collated, plotted and queried on screen in the field, thus saving time, money and effort.

The automated process involves entering data into a spreadsheet and then uses ArcView (the GIS package) to spatially display and calculate all related points and paths.

These graphical elements representing the points and paths have associated tables where distance and velocity values are available for query.

What used to take hours now takes a few minutes with the added advantage that results can be verified on a laptop whilst still in the field.

The GIS process successfully automates calculation and plotting and is also a simple one to use by those who don't know a lot about GIS.

Left: Rodney Nowrojee. Photo by Verna Costello.

# CALM showcased at Conference

CALM staff from the Midwest, Como and the Wheatbelt contributed to the highly successful State Landcare Conference recently held in Geraldton.

by Ron Shepherd

(Wildlife Branch) was on the conference steering committee, Ron Shepherd (Midwest Region) on the organising and program committee, and Ann-Maree O'Callaghan on the organising and tours committee.

CALM's high profile ensured that the conference was a significant forum to highlight the benefits of integrating nature conservation with farm planning and management.

This was the first time that the conference had been held outside the metropolitan area, ensuring that it had greater applicability to the rural community.

About 450 people attended, with more than 40 per cent being from the farming sector.

The conference addressed the immediate on-ground landcare actions needed to deal with salinity and rising water table issues.

The team that pulled the conference together was drawn from CALM staff involved in Landcare matters: Penny Hussey

In addition to a full program of speakers, workshops, and discussion groups, the conference gave landcare organisations an opportunity to showcase their work and provide information, in displays in the conference venue foyer.

CALM's display at the conference illustrated the types of landcare activities that staff are involved in, and how CALM can help farmers and landcare groups.

Penny Hussey included information about the Land for Wildlife Scheme, which has seen 10 properties in the Midwest Region already registered since the Scheme's launch at Mingenew in

February this year.

Gary Hartnett (Pine Sharefarms) highlighted the development of maritime pine as a commercial tree crop in low agricultural regions, and a number of farmers expressed interest in CALM's proposal to develop large-scale plantations in the Midwest Region.

The CALM display also focused on the protection and management of remnant vegetation on farms, an initiative of Ann-Maree O'Callaghan's Regional Ecologist—Landcare pilot project.

Also attracting attention was information on *Western Shield*, and CALM's new CD-ROM *Wild about Western Australia*.

A highlight was the pre- mid- and post-conference tours that featured a number of CALM's activities in the Midwest Region.

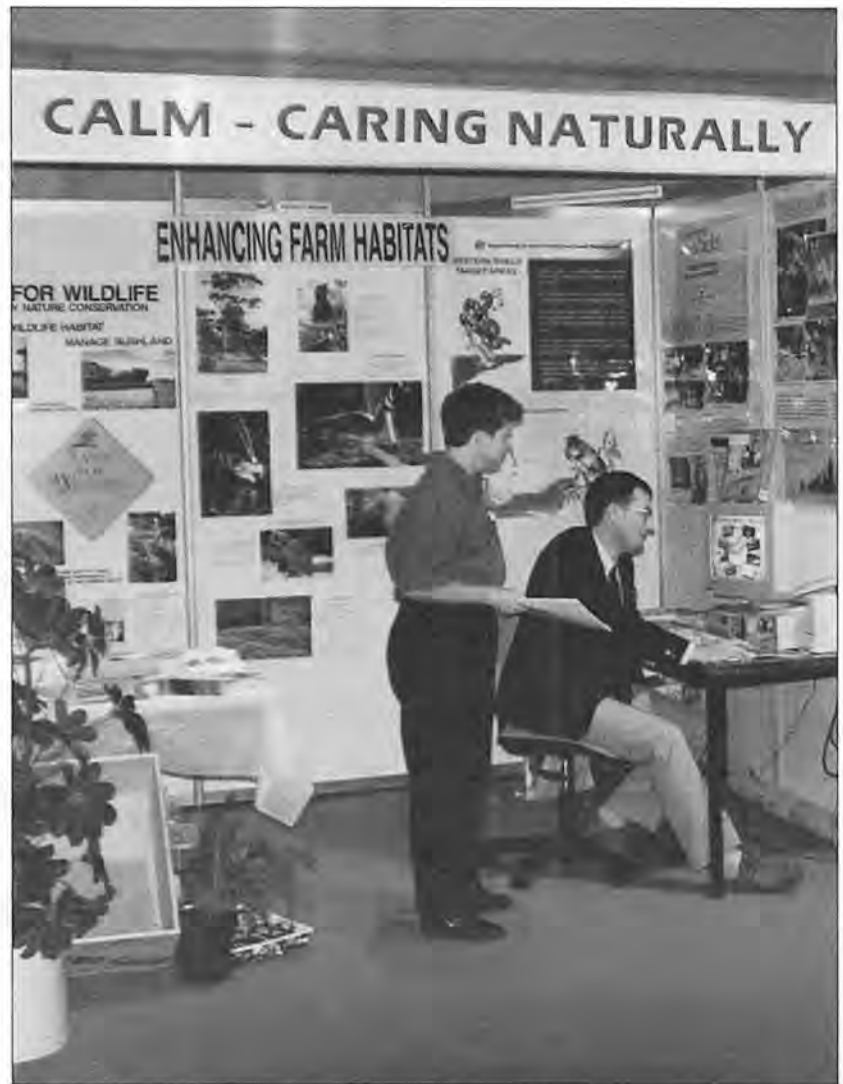
Ann-Maree O'Callaghan, Pat Ryan, Rebecca Wolstenholme, Penny Hussey and I were all involved in leading groups on the seven tours held

during the conference.

The tours visited maritime pine and oil mallee agroforestry plots, a sandalwood establishment trial in the Northampton area, roadside and farm remnant vegetation to discuss management and protection issues, rare flora recovery programs, and visits to conservation reserves (Coalseam Conservation Park and Lesueur National Park) to discuss their management as well as conservation and tourism values.

The conference was an excellent opportunity for CALM staff to network with rural people involved in land care throughout the State, and to promote CALM's pivotal role and deliver the State Government's Salinity Action Plan.

Wherever the next State Landcare Conference is held, it is hoped that CALM will maintain the strong presence it had this year, so that the appreciative reception it received from other participants will grow and deepen.



Ann-Maree O'Callaghan and Ron Shepherd at CALM's display at the State Landcare Conference. Photo by Mike Meinema



Visiting Calgardup Cave are, left to right, NPNCA Deputy Chair Marion Blackwell, Busselton Parks and Recreation Officer Neil Taylor, NPNCA Chairman Tom Day, Director of National Parks Jim Sharp, and former NPNCA member Don Paterson. Photo by NPNCA member Pat Barblett.

## NPNCA visits national park

THE community has a powerful influence on the management of reserves throughout Western Australia. This is reflected in the selection of 11 of the 15 members of the National Parks and Nature Conservation Authority (NPNCA) who are nominated by the Minister for the Environment from sections of the community specified in the CALM Act of 1984, and who are subsequently appointed by the Governor.

The specified community interests include representatives of tertiary institutions, local government, Aboriginal interests, voluntary recreation organisations, voluntary conservation organisations, fishing interests and professional interests concerned with nature conservation.

The other four members are ex-officio, and currently they comprise: CALM Executive Director Dr Syd Shea, Director

by Aminya Ennis

of Nature Conservation Keiran McNamara, Director of Forests Don Keene and Director of Parks, Planning, Tourism and Recreation Jim Sharp.

Part of the NPNCA's role is to examine proposals for recreational and tourism use of national parks and other reserves.

Several members of the NPNCA recently conducted a field visit to the Leeuwin-Naturaliste National Park to examine a number of management issues in the park.

Accompanying them were Busselton District manager Roger Banks and Busselton District parks and recreation officer Neil Taylor.

The trip gave members a chance to inspect and discuss a number of recreation and tourism proposals that will be referred to the Authority for its consideration.

These included the redevelopment of Conto campground, lease options for the caving huts at Boranup, and future management of Calgardup Cave and Giants Cove in the Leeuwin-Naturaliste National Park.

The trip also gave the visitors a chance to inspect a number of recreational and tourism proposals that had been approved at past meetings, including the recently completed National Trust house at Ellensbrook.

NPNCA chairman Tom Day said that on-site reviews of this kind were invaluable to the Authority.

"They are particularly beneficial in strengthening links between the Authority and CALM, when issues can be discussed with staff who are involved in the day-to-day management of the park, and with other conservation-minded groups in the wider community," he said.

## Japanese visit Hills Forest

by Kate Baxter

MORE than 100 junior high school students, interpreters and supervisors from Fukui Prefecture in Japan spent a day at The Hills Forest Activity Centre recently, discovering some of Western Australia's forests, plants and animals, as well as Aboriginal culture.

The visit was part of a ten-day cultural and language exchange program, while the students stayed with Perth families.

The group had requested an eco-experience while in WA, and the Centre jumped at the opportunity to showcase the many activities it offers.

Their day at The Hills Forest began with a brief talk about what CALM is doing to protect our native plants and animals, followed by an Aboriginal dance performance and a traditional Aussie barbecue lunch.

To ensure quality bush experiences, they were split into

smaller groups, accompanied by forest officer Greg Standing, who took them to rarely seen timber areas behind Mundaring Weir for some spectacular views and talks about native and introduced timbers.

Trevor Walley from CALM's Aboriginal Tourism Unit introduced the Japanese visitors to the Nyoongar culture, explaining Dreamtime stories and legends, how Aborigines sought and built shelters, found food in the forest and how they made tools and musical instruments.

Renowned local naturalist Eric McCrum led a short walk to shed some light on the mysteries of the bush, how animals and plants fit into the forest eco-system and how to recognise signs of these animals.

The students then had an opportunity to meet rehabilita-

tion 'patients' from Chidlow Marsupial Hospital, and for a close encounter with joeys, woylies and pygmy and brush tail possums.

A fourth activity option was forest paper making with Mary Woodward, who showed the visitors how to make cards with flowers and natural bush materials, which they took with them as a permanent reminder of the forest.

Programs officer, Jenny Yeatman, said that it had been very satisfying to be able to organise bush activities for this group of students.

"They really enjoyed the Aboriginal dance performance and were fascinated by Eric McCrum's intimate knowledge of the forest."

"We're hopeful that this will open more doors to visiting tourist groups who can take advantage of our tailor-made activity programs," Jenny said.



Trevor Walley shows Japanese visitors how glue for fixing quartzite to the business end of tools (knives, spears, etc.) is made Nyoongar-style. Photo by Kate Baxter