

CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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DEPARTMENT OF CONSERVATION
AND LAND MANAGEMENT
WESTERN AUSTRALIA

JUNE-JULY 1994



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Arbor Day focus on forest habitat

CALM celebrated Arbor Day in Perth with the help of children from schools in the Hills area planting 150 dieback-resistant jarrah trees as part of a research program in John Forrest National Park.

The trees symbolise CALM's integrated approach to sustainable use of the native forest.

Dieback not only kills jarrah trees and many other susceptible species, it also can lead to destruction of native wildlife habitat. But feral animals, especially foxes, also destroy wildlife, and so if we are to conserve our forests and native animals, we need to combat the problem on several fronts.

This was the message from Environment Minister Kevin Minson who helped with the celebration.

"If we can regenerate areas decimated by dieback, and control predators, we have a real chance of restoring nature's balance," Mr Minson said.

Each of the 150 trees planted was marked with a special tag that would enable CALM scientists to carry out further work at the site.

CALM researcher Mike Stukely plans to plant further seedlings of 'elite' dieback-resistant families selected from a breeding program.

Mike has found that while none of the jarrah families is immune to dieback, resistant seedlings can tolerate the infection.

This resistance is highly heritable and researchers believe it probably is controlled by several genes, rather than by just one.

This indicates that the resistance is unlikely to break down over time.

Selected seedlings have been cloned by scientists at Murdoch University and Alcoa of Australia using tissue cultures.

Resistant clones CALM planted in 1988 in dieback-affected bauxite minesites, and inoculated with *Phytophthora cinnamomi* - the fungus which causes the disease - are growing very well compared with susceptible clones, many of which have died.

Further research at Murdoch University has shown that resistant jarrah

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John Forrest National Park ranger Karl Mucjanko (left), researcher Mike Stukely, CALM Como, dieback co-ordinator Paul Jones and Arbor Day co-ordinator Greg Heberle, both from CALM Crawley, helped Swan View students Kristian Madsen and Jason Tischler and Glen Forrest students Sara Kyunaston, Kate Brown and Jodie Kimber with the tree planting on Arbor Day. Photo by Greg Wood

CALM moves to self-funding

THE Department of Conservation and Land Management is moving towards becoming a self-funding agency.

The State Budget brought down this month introduced big changes for the Department including a sharp drop in new borrowings.

Under the moves, CALM will retain all timber revenues and proceeds from asset sales, including land sales. The revenue and proceeds will be used

to fund other programs and retire debt. This will result in CALM's new borrowings falling from \$10 million in 1993-94 to \$1.2m in 1994-95 and nil from 1995-96.

It also means the net cost to Government of CALM's programs will fall from \$40.8m in 1993-94 to \$34.9m in 1994-95.

Environment Minister Kevin Minson emphasised the change to CALM's funding arrangements would not mean a reduction in the Department's

nature conservation, wildlife management, tourism or recreation programs.

CALM's debt reached \$122m in 1993 because the Department could not use its revenue to repay debt and fund commercial operations

Analysis by CALM has shown that unless there was radical change, the Department's demand on consolidated revenue would reach \$150m within 10 years.

The changes adopted by the

Government mean that by the year 2000, CALM substantially will have retired all outstanding debt and by 2004 largely will have become a self-funding agency.

Nature conservation, tourism and recreation programs will be funded through cross-subsidisation from forest resource management income and through a Government community service obligation payment.

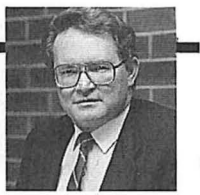
This will make all funding

arrangements for all CALM's programs very open and accountable.

At the same time, CALM will review its structure with an emphasis on commercialisation of various services it currently performs.

The new arrangements also will enable CALM to increase its involvement in partnerships and contracts with the private sector.

◆ Continued page 2



Over the last several days some of the changes to CALM's administrative and financial arrangements that I have been foreshadowing have been initiated. As reported in this edition of CALM NEWS, we now have a different budget system.

CALM will receive an allocation from the Consolidated Revenue Fund to enable us to fulfil our community service obligations (for example, fire control), but the balance of our budget will come from revenue.

This new form of budgeting - called 'net appropriation' - is a major advance. For the first time, we will be rewarded for the revenue that we collect, and we will now be able to manage our debt. (Net borrowings have been reduced from \$10 million last year to \$1 million this year). But, of course, it carries with it obligations. Net appropriation means that if we are not efficient, or if we don't meet revenue targets, we will then have less money in our budget to carry out conservation and land management tasks.

It is important to note that running efficient commercial operations and making a 'profit' is not the end objective for CALM. It is one of the means to an end. Our ultimate objective is to ensure that lands and wildlife entrusted to our care are managed sustainably and for the benefit of everybody in Western Australia.

The more efficient we are, the larger the surplus, and the more resources we will have.

The most important way that we can ensure we are efficient in our commercial operations is to make sure our administrative systems and structures are such that we can accurately measure financial inputs and outputs and that we have clear lines of accountability.

While I am probably the most vociferous supporter of an integrated approach to land management, I also believe that we have to be careful that commercial operations are specifically provided for.

That is why we have introduced the concept of business units.

Business units are not there to replace the integrated agency. In fact, they depend for their success on the existence of an integrated agency. But business units will ensure that we have clear lines of accountability - that means there will be people who have specific responsibilities to deliver prescribed commercial objectives.

It will also mean that we can properly account for the money we are spending in commercial operations and the money we are receiving from them.

I can appreciate that the formation of new structures, like the business unit, does cause some disruption to departmental activities and that some individuals may be concerned.

The formation of the units is a way of ensuring job security, not threatening it.

I believe that in addition to ensuring security of people's employment, it is important that we also secure creative and interesting jobs within CALM.

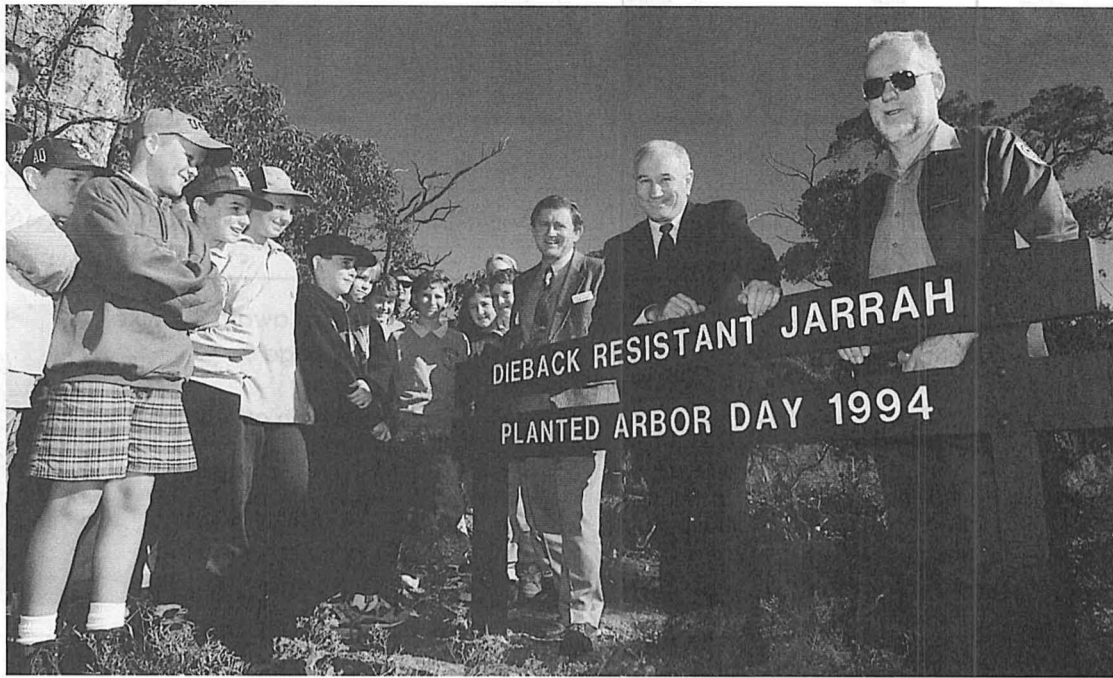
It is only by developing mechanisms like the business units, which will ensure that we have sufficient resources to carry out the task that we are allocated, that we will be able to provide this type of job security.

Whether people are part of, or outside, the business units will not affect their career pathways. Ultimately, all positions within business units which involve new duties will be advertised, and there will be a free interchange over time between people within and outside the business units.

It is inevitable - because we are pioneering new approaches to management - that we will make mistakes. I ask everybody to bear with the changes that are occurring, because, at the end of the day, the opportunities created by being innovative are far greater than those that come from being part of an organisation that never changes, and becomes moribund.

Dr Syd Shea, Executive Director

A day for forest habitat



CALM's Swan Region manager Alan Walker, Environment Minister Kevin Minson and John Forrest National Park senior ranger George Duxbury with the sign Mundaring District prepared to mark Arbor Day 1994. Photo Greg Wood



Walyunga National Park ranger Steve Strachan kept up the supply of johnny cakes at John Forrest National Park on Arbor Day. Photo by Greg Wood

CALM moves on funding

From page 1

These contracts include managing bluegum plantations on behalf of major Asian paper manufacturers. CALM also has entered an agreement with a major Australian chemical company, the Victorian-based Amrad, to investigate compounds from native plants that could have potential for development into medicines including treatments for HIV.

CALM also will encourage more private sector investment in the conservation estate through leasing facilities such as caravan parks, restaurants and nature-based tours.

Major initiatives include the introduction of the Ibis Aerial Highway in conjunction with Kimberley-based air charter operators, upgrading the Bibbulmun Track and extending it from Walpole to Albany, and significantly improving facilities in the Valley of the Giants tingle forest.

Executive Director Syd Shea has welcomed the Government's action in adopting the changes CALM had proposed in its response to the McCarrey Report.

"It will mean the Department will have much more flexibility in creating opportunities and implementing a range of initiatives," he said.

"Partnerships with the private sector already are yielding significant benefits for the Department and helping with CALM's integrated role in conservation.

From page 1

clones can restrict the invasion of the fungus into their roots in much the same way as marri or redgums that are resistant.

Dieback-resistant jarrah could be used to replant dieback sites, minesites and gravel pits, cleared land, including river catchments, amenity areas and road verges.

Operation Foxglove, a joint program between CALM and Alcoa of Australia, was an integral part of managing the South West native forest.

"By planting dieback-resistant jarrah, and implementing predator control through Operation Foxglove, we can help combat two of the scourges of the forest," Minson said.

"This integrated approach also will conserve the forest under the principle of ecologically sustainable development."

LETTERS...LETTERS...LETTERS...LETTERS...LETTERS...LETTERS...LETTERS...LETTERS

I am writing to express my appreciation of the assistance given to me by park rangers Ian Solomon and Alex Rogers.

Shortly after, Alex and Ian offered assistance and suggested that Ian carry our excess gear into Kununurra on his trip there that afternoon.

He suggested that I could have East Kimberley Tours deliver the replacement parts to Alex, and Alex said he would fit the bearing and tow the trailer in on his Friday trip to Kununurra.

I felt this offer of assistance was above and beyond the call of duty, and it confirmed my opinion that the rangers were genuinely interested in their jobs, and aimed to provide a good service.

I also believe the good quality of service demonstrated by the Bungle Bungle rangers must have been supported by good quality management.

I would be pleased if you could pass on my recognition of good service

and were unable to come up with a solution that didn't involve considerable time and expense.

Just a brief note, as Carl Grant's research supervisor, to say how much I appreciate the superb efforts by you and your crew on the Jarrahdale Bauxite Rehabilitation Site burns of Tuesday and Wednesday, May 17 and 18.

I must admit that Carl's readings of the fuel loads left me with more than a little apprehension concerning the safety of burning them in Autumn.

Although the research objectives called for Autumn burns, I would have fully understood any reluctance to achieve them this year with the long dry spell adding to the problems imposed by the extreme fuel levels.

I have come to expect that any fires set by CALM will come in within prescriptions and be carried out safely. Unfortunately, as I found out during my review of the CALM pre-

scription burning program for the Government, most of the people of Western Australia have only a limited appreciation of the dangers imposed by high fuel buildup and severe fire weather conditions.

I think even fewer of the general public in Western Australia have an appreciation of the skills of CALM's fire crews and the fire control officers.

It is a pity that you were not able to have an audience of a million or so of Perth's inhabitants to watch your work on this fire.

I think then more of the general tax-paying public would feel much easier about increasing the funding for CALM's fire protection program.

Congratulations on a job well done! We are in your debt.

Sincerely
David T Bell
Associate Professor in Plant Ecology
University of Western Australia

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West Week Expo

A LIGHTER moment during the 1994 West Week Expo (left) saw Yanchep National Park ranger Hardy Derschow helping "Perth and Beyond" principal Maggie Edmonds feed bush tucker to Indigenart's Aboriginal artist-in-residence Ronald Williams.

Seated are (left) Dr Diane Mossenson, proprietor of Indigenart, and "Perth and Beyond" tour guide Veronique Johnston, holding a plate of kangaroo sausages, witchetty grubs and quondongs.

"Perth and Beyond" is among several tourism-oriented companies that work closely with Hardy in the promotion of Aboriginal culture tours.

Indigenart is an art gallery specialising in Australian Aboriginal art and crafts.

Diane says she plans soon to hold evening functions where visitors can

learn about bush medicine and bush tucker from Hardy and other Aboriginal people.

"I see such functions as a valuable means of creating cross-cultural awareness and appreciation," Diane said.

Below: Perth's own 720 6WF radio personality Peter Holland samples a fat witchetty grub while Hardy Derschow waits to offer him another bush tucker delicacy - kangaroo sausages.

The sampling took place at the West Week Expo where Peter interviewed Hardy 'live' about his cultural tourism work at Yanchep National Park.

Hardy was on duty at the Expo to invite visitors to experience some of the delights of Aboriginal bush tucker.

In great demand at the Expo, Aboriginal bush tucker is a standard feature among the tours Hardy

regularly conducts at Yanchep National Park.

CALM also had a static display of LANDSCOPE expeditions and publications at the Expo.

Staffing was rostered among: Kevin Kenneally, Estelle de San Miguel, June Ellis, Barbara Moss, and Marcus Benbow, with LANDSCOPE Expeditions administrator Jean Collins from UWA Extension, and volunteers Kim Cream, Rowan Galbraith and Maria Lee.

West Week is an annual event that provides a vehicle for any group, large or small, to demonstrate the part it plays in Western Australian life - which is a mix of commerce and industry, community service, recreation, sport, arts and culture; its chief aim is to encourage support of WA enterprise.

• Story and photos by Verna Costello

International honour for CALM Director

DIRECTOR of Corporate Relations Ron Kawalilak has won an Award of Excellence in the 1994 Gold Quill Awards program of the International Association of Business Communicators (IABC).

The award, one of four presented this year to professional communicators in Australia, New Zealand and the Asia-Pacific region, is in recognition of his work in directing the ongoing develop-

ment of LANDSCOPE.

"The award recognises that CALM's communications work is among the best organisational communications in the world," Ron said.

"Entrants to the award program this year were from many Fortune 500 companies as well as from major consultancies in North America, Europe and Asia.

"CALM takes its communications role very seriously and it's gratifying

to win the Gold Quill.

"I share it with the Corporate Relations team who work on each issue of the magazine - Ray Bailey, David Gough, Carolyn Thomson, Verna Costello, Helenka Johnson, John Hunter, Sue Marais, Maria Duthie, Stacey Strickland and Gooitzen van der Meer - and the many other CALM staff who write and contribute to the magazine."

The Gold Quill is awarded annually to those

who have demonstrated the highest professional standards in communication programs or projects; it is recognised throughout the communications community worldwide as a hallmark of communications excellence.

IABC is the leading international professional association for public relations and business communications, with more than 11 500 members working in 40 countries.

What's new on the shelves

THE following publications have been produced recently and should be available from Stores Branch, Front Counter Como or, when out of print, from the CALM Library.

Leaflets

- ◆ Yanchep National Park Activities Guide
- ◆ Shark Bay Marine Park
- ◆ Kalbarri National Park - Reptiles and amphibians
- ◆ Kalbarri National Park - Mammals
- ◆ Kalbarri National Park - Geology

- ◆ Dryandra Woodland Ecology Course
- ◆ C E Lane-Poole Memorial Trust
- ◆ Shark Bay World Heritage Newspaper
- ◆ Go Bush! Autumn Activity Guide
- ◆ Seed Price List 93-94
- ◆ Fragrant Harvest - LANDSCOPE reprint
- ◆ Dwellingup and Lane-Poole
- ◆ Windjana Gorge National Park - Ibis Aerial Highway
- ◆ Bell Gorge - Ibis Aerial Highway
- ◆ Mount Augustus

- ◆ National Park
- ◆ Winter Firewood
- ◆ Millstream-Chichester National Park (reprint)
- ◆ Crocodiles (reprint)
- ◆ CALM Uniform Catalogue
- ◆ Discovering the Hills Forest (reprint)
- ◆ Karijini National Park (reprint)
- ◆ Mt Hart Homestead

Booklets

- ◆ Nuytsia Vol 9 No 2 - \$10
- ◆ Forest Management Plan - \$10
- ◆ Management Strategies for the South West For-

- ests of WA - Analysis of Public Submissions - \$5
- ◆ What's in a Word - A glossary of terms and definitions to assist in naming natural features, assets and locations managed by CALM.
- ◆ CALM Internal Telephone Directory
- ◆ Growing Local Plants for Education - \$5
- ◆ Operation Foxglove
- ◆ Seasoned with Fire - LANDSCOPE reprint
- ◆ Forests for the Future - LANDSCOPE reprint
- ◆ Matilda Bay - Have your say
- ◆ Marrinup Forest Tour (reprint)
- ◆ Will Comprehensive Regional Assessment Work?

Reports

- ◆ CALM Science Vol 1 No 1 - \$10
- ◆ Lane-Poole Award 1987
- ◆ A Plan for the Protection of South Coast Vegetation from Dieback
- ◆ Fire Review Panel

Draft Management Plans

- ◆ Dryandra Woodland

Manuals

- ◆ Training and Development 1994

Posters

- ◆ Arbor Day 1994
- ◆ Shoalwater Islands Marine Park - \$5.

Upgrading of homestead

THE tale of recovery of rare and endangered native animals in the jarrah forests of the Collie District will be open to more people under a new program CALM has initiated.

The Department is spending \$20 000 to upgrade facilities at the homestead in the Battalling forest block between Collie and Darkan.

The work, which is now under way, includes renovating the farmhouse, laying new floor coverings,

installing a new shower and toilet, and providing more comfortable beds and chairs.

The farmhouse will then be available to tourist operators who can take groups of up to 20 people on expeditions into the forest.

CALM Collie District Manager Peter Moore says the move is a tremendous boost to nature-based tourism in the region.

"Battalling is a wildlife haven and abounds with species found in only a few other areas," he said.

"Work by CALM over the past few years has seen fox numbers brought under control, giving populations of small mammals a chance to recover.

"The declared rare species include woylies, chuditch, numbats and southern brown bandicoots. Other native animals that abound in the area include brushtail possums, pygmy possums and echidnas."

CALM will continue to manage the farmhouse but the private sector will run the tourism ventures.



A book, by George, is what we'll get

RANGERS past and present have many a story to tell - the hilarious and the hair-raising as well as those that are quite moving and dramatic - and George Duxbury wants them all.

George wants rangers' wives to get into the act, too; their perceptions are often quite different from those of their ranger partners and a good tale could well be missed for lack of encouragement.

"Many CALM staff would be unaware of these quiet achievers, who cope with visitors and phone calls and other emergencies while their partners are working out of reach in a park," George said.

"Many have small children to care for as well - a

by Verna Costello

24-hour job if ever there was one - so the combination has to be a fertile field of stories."

George is Mundaring district senior ranger at John Forrest National Park and has long cherished an ambition to get this slice of oral history into print.

"I'd like to do this well before the older retired rangers leave planet Earth for the national park in the sky," George said.

"So if you know of any retired rangers, make sure they're made aware of this long-overdue publication.

"Much has been written about foresters and for-

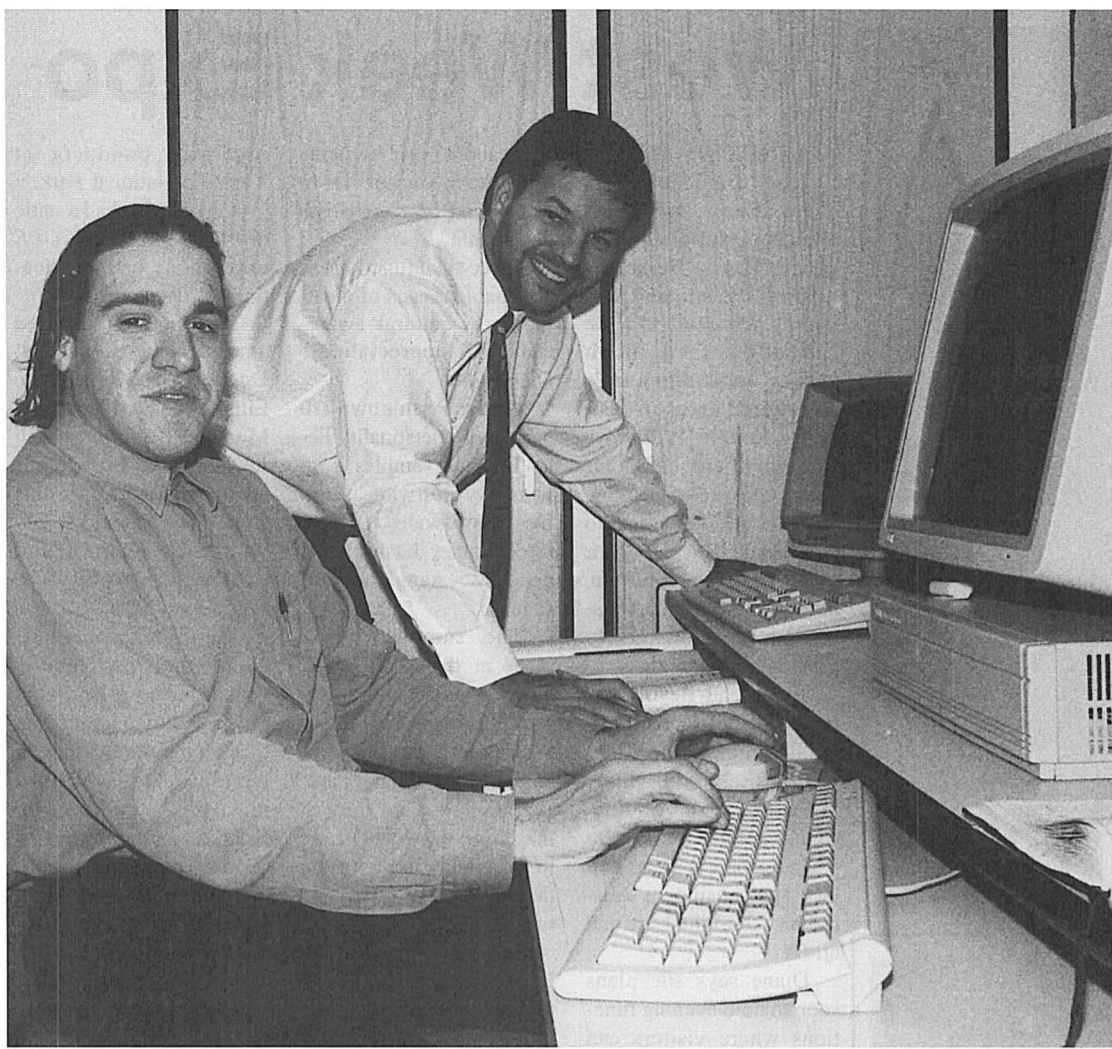
estry, but to my knowledge, nothing on rangers.

"Don't be put off by the belief that you're not a crash-hot writer, just get it down as if you're telling a yarn and send it in to me.

"Executive Director Dr Syd Shea has indicated his interest in, and support for my plan, so the rest is up to you.

"And if you're still unsure, either about your storytelling skills or the merit of the story, just phone me on (09) 298 8344 or leave a message on my answering machine and I'll get back to you.

"You can also contact me after hours, or leave a message on the answering machine, on (09) 298 8367."



Senior computer operator Mark Debelich, foreground, and acting operations administrator Alberto Bartolomei carrying out tests on the new AARNet. Photo by Verna Costello

A world of information will soon be at our finger tips

CALM soon will be able to gain access to information worldwide through its membership of Academic and Research Network (AARNet), the Australian component of the international network INTERNET.

It is useful to think of INTERNET not as one network, but more like a collection of networks, that includes AARNet.

According to INTERNET, we will be able to gain access to "megabytes of data on almost any topic imaginable," and "in addition to searching online databases, you can carry on discussions with colleagues worldwide, participate in discussion groups, subscribe to electronic journals, and collect free software".

INTERNET'S resource catalogue lists more than 300 resources on topic areas such as biology, chemistry, computer science,

by Verna Costello

environment, forestry, health, nutrition, oceanography, physics and many more.

CALM's membership means these vast resources of information will be available to those staff whose personal computers are connected to the local area network (LAN)

We will be able to move whole pages, documents and files from all over the world on to our personal computers.

Electronic mail (e-mail) is an example of one of INTERNET's time and paper-saving features.

CALM staff will be able to 'mail' messages to anyone in Australia who is connected to AARNet or anyone around the world who is connected to INTERNET.

Within minutes, for example, a letter can be sent and delivered, and a re-

sponse received almost immediately.

Apart from running our own e-mail lists we can be placed on the e-mail lists of any number of other member organisations.

With e-mail it is just as easy to send a message to a group of people as it is to send it to one person.

CALM staff will also be able to gain access to any computer in the world that is connected to INTERNET.

Many organisations, such as libraries and universities, allow access to information on their computers.

Information Systems branch manager Bevan Kerr says CALM's membership costs \$5 500 a year, but when weighed against the cost of mail, phone calls, faxes and time saved gaining access to the world's information, the savings are considerable.

And the more we use AARNet and INTERNET, the cheaper each

use becomes.

INTERNET's guide tells us that its networks are in more than 40 countries, and rapidly expanding.

Eastern European and even the poorer Third World countries are looking at ways to take part as a means of raising their education and technology levels.

Further information on AARNet or INTERNET is available from Information Systems branch on (09) 334 0257.

There is a lighter side to INTERNET - for example, let's suppose you've worked long into the night and find you have to prepare your evening meal.

And let's also suppose you've lost your favourite recipe for Loubia Bil Luz (Algerian green beans with almonds), and that nothing else will do; no problem - the recipe, in both German and English, will be at your fingertips. Bon appetit!

How's your health?

	Yes	No	Don't know
Are you a non-smoker?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is your blood pressure OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is your cholesterol level low enough?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are you a healthy weight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you get regular exercise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

by Linda Gilbert

Can you answer yes to these questions? Then you're on the right track to a healthy heart.

The more 'Noes' you have, the greater your risk of heart disease.

If you don't know the answers, now is a good time to find out.

That's because a healthy heart is vital to your health and enjoyment; it gives you energy to enjoy a fuller, longer life.

Your heart is an active muscle that needs its own blood supply; it gets this through coronary arteries, which run over the heart's surface - we need to keep our arteries in shape so the supply is guaranteed.

The internal mechanics of the heart must also be healthy to meet the demands of your body - whether you're running a marathon or just walking to the car.

There are four easy steps to keep your heart in

its best condition.

First, be a non-smoker. There are no safe levels of smoking.

Smoking contributes to heart attacks and strokes and causes about one-third of all cancers.

It's never too late to benefit by giving up; the risk of heart attack drops quickly after you quit.

Second, eat a low-fat diet to help keep your weight and blood cholesterol down.

Being overweight also tends to make existing heart problems worse.

Third, keep a check on your blood pressure.

High blood pressure means your heart has to work harder to pump blood around the body.

It also contributes to the artery-blocking process.

Because high blood pressure usually shows no

symptoms until it has caused serious disease, you should have your blood pressure checked regularly by your doctor.

And finally, exercise regularly.

You don't have to puff and sweat; regular moderate exercise, such as walking, brings the same benefits.

It's the amount of energy you use that counts, not how you use it up, or how quickly.

The more you exercise, the better for your heart and health generally.

Keep reading this column for tips on keeping a healthy heart.

Contact Linda Gilbert, Health and Fitness Coordinator, by telephoning (09) 334 0397, for further information.

Information source National Heart Foundation, 334 Rokeby Road, Subiaco WA 6008. Telephone (09) 388 3343.

Grant will improve penguin viewing

by Verna Costello

A penguin-viewing facility and interpretation centre on Penguin Island will benefit from a recent \$132 000 Commonwealth grant.

The grant was one of 49 selected for funding this financial year out of more than 500 submissions under the Regional Tourism Development Program.

CALM's Swan region marine operations manager Peter Dans said the successful bid had come as a result of a joint effort by CALM, the City of Rockingham and the

Western Australian Tourism Commission.

"CALM initiated the project and the application for funding was made through the City of Rockingham council in October 1993," Peter said.

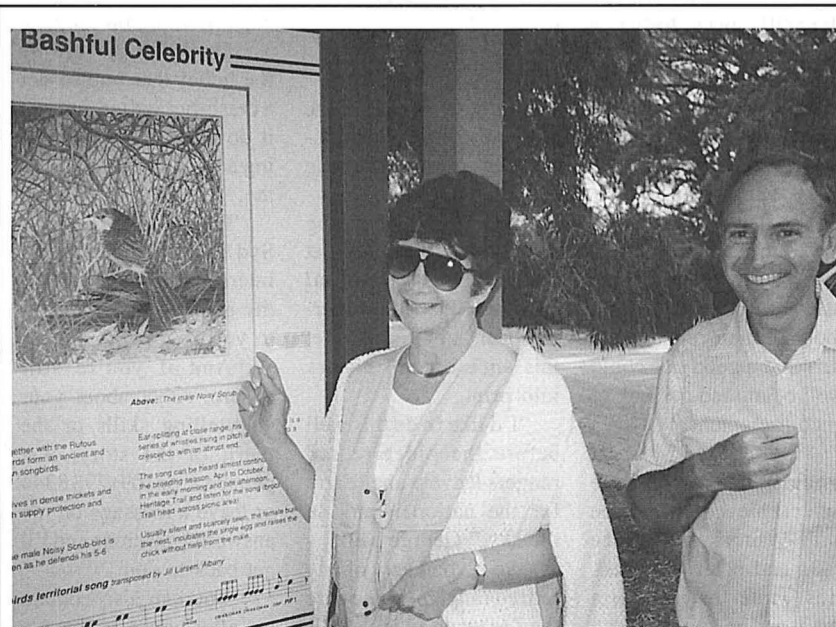
The penguin-viewing facility is expected to have rehabilitated penguins, unsuited for release into the wild, housed in an environment identical to their natural habitat.

This will allow the pub-

lic to see and learn about the animals without the island's resident penguins becoming unduly stressed or damaged by visitors.

"Construction of the penguin-viewing facility will complement the recently completed Mersey Point tearooms, ticket office and interpretation centre and meet the demands of growing local, interstate and overseas tourist numbers," Peter said.

"Penguin Island picnic areas and boardwalks, costing \$116 000, already have been installed by CALM.



Ann Belkov and Chris Haynes admire a noisy scrub bird poster at Two Peoples Bay. Photo by John Watson

US visitor at workshop

by Helenka Johnson

WHAT do managing New York's Statue of Liberty and managing a national park in Western Australia have in common?

The answer is visitors. Although the numbers of sightseers vary considerably, managers in both the US and in Western Australia have the task of providing visitor facilities and protecting sites from over-use.

Ann Belkov is the Superintendent of the Statue of Liberty and Ellis Island, which is visited by 4.5 million tourists each year, and

she was the guest speaker at a three-day CALM workshop at New Norcia.

The tourism and recreation workshop attracted people from seven regions, plus staff from Nature Conservation, Policy and Extension, Land Administration, Planning, and Recreation and Landscape branches.

The workshop was designed to improve the planning and management of tourism and recreation.

There were many excellent speakers from outside and inside CALM, with Ann Belkov's contributions being particularly challenging and enjoyable.

Ann's long history in recreation, interpretation, visitor services and park management made her an ideal presenter.

In exchange, she was keen to learn about issues facing her WA colleagues.

The conference led to a project group being formed to map a new direction for CALM's recreation program.

The group has now met

once and a document is being drafted for wider comment.

While in WA, Ann was a guest of CALM, the Ministry of Sport and Recreation and Edith Cowan University, with CALM as official host during the first segment of her visit.

Ann spent most of the rest of her visit as a visiting Fellow to Edith Cowan's Department of Leisure Sciences.

Her contributions at these forums, including a Recreation Conference at Rottneest, received enthusiastic responses.



Terena Clarke (left) and Jenny Rutherford.
Photo by Lisa Craig

Bush smart duo

WHILE scouring the Lane Poole Reserve for would-be campers and run-away dogs, intrepid fee collectors Jenny Rutherford and Terena Clarke came across an escaped camp fire.

Being quick-witted and willing to take up the challenge, they radioed Dwellingup HQ for assistance then cast around for something to help contain the flames.

A broken rakehoe was found and, adding a little instinctive bush know-

how, they raked a boundary around the fire and stopped it from spreading into the nearby pines.

Assistant forest officer Steve Raper arrived on the scene shortly afterwards and found Jenny and Terena in complete control of the situation.

Radioing back to Dwellingup HQ, Steve commended them on their 'bush smarts' and fighting spirit.

Missing dolphin presumed dead

MANAGEMENT of the Monkey Mia dolphins continues to provide challenges for the Gascoyne District.

Recently, the health of Finnick, a four-and-a-half-year-old male calf, appeared to be deteriorating rapidly. It had been apparent for quite a while that his behaviour was inconsistent with that of his off-shore counterparts.

Unlike other juvenile males who spend most of their time socialising and hunting together, Finnick was spending more time close to the beach than any other regular dolphin and was continuing to associate with his mother and other female relatives, even though he was weaned.

It was difficult to know how to treat his significant weight loss (his body was starting to hollow out) when the cause was not known.

The general policy with the Monkey Mia dolphins is to maintain their "wildness" and thus not handle them.

However, for Finnick's well-being it was decided that it was necessary to take blood samples to obtain information on his



Francois Peron National Park ranger Rex Walker, Shark Bay Shire's Monkey Mia ranger Dave Charles, Underwater World dolphin trainer Mark Whitfield and Gascoyne district manager Ron Shepherd carry ashore a very sick Finnick for tests. Photo by Aminya Koch

medical condition.

Underwater World provided the services of dolphin trainer Mark Whitfield, who flew to Shark Bay for the day to co-ordinate the exercise.

There was concern about possible stress to Finnick during his capture and removal from the ocean, and about the other

by Ron Shepherd

dolphins reaction to him being handled.

The exercise went smoothly and the dolphins showed no adverse response - Finnick continued to interact with the public after his release.

He was found to weigh 30 per cent less than the normal weight for a dolphin of his size.

The results of the blood samples were sent to Nick Gales, who now works for the Department of Conservation in New Zealand, for interpretation.

However, Nick could not find any indication of a

medical condition in the results. This left the hypothesis that Finnick's poor condition was the result of behavioural problems.

Unfortunately, before strategies could be implemented to address this situation, Finnick went missing and it is assumed he has died.



Mike Cully monitors effects of applications of gibberellic acid (GA 4/7), a plant hormone used to stimulate flowering of *Pinus radiata* elite clones at CALM's Hedged Artificially Pollinated Seed Orchard (HAPSO). The HAPSO is in Manjimup, and any type of tree that is needed in a *Pinus radiata* plantation can be created there.

Photo by Trevor Butcher

Trust award goes to Mike

STUDYING pine and bluegum tree-breeding is how CALM technical officer Mike Cully intends to use the 1994 CE Lane Poole Memorial Trust award he received in May.

Mike is employed at CALM's tree nursery at Manjimup and has been involved in the Department's tree-breeding activities for many years, working mostly with pine and eucalypt species.

His study tour will include visits to Rotorua and Christchurch in New Zealand, Cardwell and Gympie in Queensland, Traralgon and Melbourne in Victoria, Adelaide Hills in South Australia and Burnie and Launceston in Tasmania.

While visiting these

by Verna Costello

centres he intends to look into seed orchard establishment and tending, irrigation, fertiliser application practices, controlled and supplemental pollination techniques, use of hormones and progeny assessment.

Senior research scientist Trevor Butcher said there was much to be gained from Mike's visit to these major tree breeding centres.

"For example, Traralgon is noteworthy for its development in *Pinus radiata* cuttings technology and management of donor hedges, while New Zealand is re-

nowned for its advanced seed orchard technology," Trevor said.

"CALM has several co-operative projects with groups in these centres and they've expressed interest in showing their activities to one of our tree-breeding staff.

"Mike will benefit from visiting these centres and broaden his experience and expertise in an area where CALM is at the forefront of technical know-how."

Mike will take up his award early in 1995.

Applications for the award are called each year by the Lane Poole Trustees. The award provides financial assistance to a CALM officer to take part in study tours or courses

relevant to their work.

The award covers the cost of travel, tuition and accommodation, and enables the recipient to study anywhere in Australia or New Zealand for up to six weeks.

Named after Charles Edward Lane-Poole, WA's first conservator of forests appointed under the Forests Act of 1918, the award was set up in 1981 with initial funding by Wesfi.

Wesfi has been the main contributor to the Trust fund since then, with support from Alcoa of Australia and the timber industry.

The Trustees are Dr Syd Shea, who is also chairman, Mr Denis Cullity (Chairman of Wesfi) and Mr Tom Wood.

Desperados win

THE Dwellingup Desperados (DDs) have demonstrated their dominance in the Swan Challenge Cup volleyball tournament.

The Swan Challenge Cup, a part of the Swan Health and Fitness calendar, was hosted by Mundaring and attracted teams from Swan Region and Como Headquarters.

The Dwellingup duel was fought between its 'A' team, captained by Mark 'Hum' Humble, and its 'B' team, captained by Ian 'Sam' Freeman.

Dwellingup Desperados 'B' team took the first set with good teamwork, controlled digs from Keith Low and unselfish net play from Bill Plenderleith.

by Linda Gilbert

Dwellingup Desperados 'A' fought back with some sharp serving by John Hanel in the second set.

'A' Team's Darren Ball kept the final point alive with Mark Humble being set up by teammates for the 'nail-in-the-coffin' spike that won the match.

The competition for the bronze was as fierce as for first place, with Mundaring meeting The Region.

Mundaring cruised to victory in the first game, but The Region regained confidence when Alan Walker got in his first serve of the match, leading to victory.

The final game see-

saw, but finally Alan Sands served the game out, clinching the bronze for The Region.

The wooden spoon play off saw Forest Management branch out in force.

Wildlife branch roped in some extra 'wildlife' and pushed Forest Management to a third game to take the match.

As the winners, Dwellingup Desperados 'A' Team has the trophy and the responsibility to organise next year's event.

"It was a great day and we're looking forward to more teams joining in next year," said Captain 'Hum' Humble.

Thanks are due go to Mundaring as hosts of a well-organised event.



Dwellingup Desperados, left to right, forest ranger Matt Reynolds, research officer Richie Fairman, Lane Poole ranger-in-charge John Hanel, forester Mark Humble, forester Grant Lamb, forest ranger Darren Ball. Photo by Linda Gilbert

The life of Brian is only just beginning

LOVINGLY restoring vintage motor cycles will be at the top of the priority list that administrative assistant Brian Andrew Fitzgerald has drafted for his retirement years.

They began at close of business on Friday May 20, when he handed over the position of 'keeper of the book' (of rules) for the CALM Kirup Social Committee for the last time and shared farewell drinks with his colleagues and friends at the district office.

Brian had given more than 44 years sterling service to CALM and the former Forests Department.

The son of steam locomotive driver Charlie Fitzgerald, Brian began employment in November, 1949 as a 'billy boy' in overseer Charlie Moore's gang at Kirup.

He spent the first two summers in the office co-ordinating and plotting fire reports from east Kirup, Kelson, Carlotta, Seaview, Kirup and Mungulup towers.

He later went on to staff the towers at east Kirup and Kelson and became a regular gang member involved in forest operations.

In 1952, the Australian Army was the lucky recipient of National Service recruit Fitzgerald, posting him at Swanbourne for the required three months.

In 1956, administrative officer Tom Davis was transferred to Busseton and Brian was

by Peter Bidwell

asked to take over as administration officer of the newly erected Kirup office "on a temporary basis".

He was appointed permanently in 1958 and has filled the position competently for 38 years.

Meanwhile, office worker Judy Kelly caught Brian's eye and they married in 1964, raising three sons, John, Craig and Brett, and a daughter Marise.

Brian has seen the coming and going of 10 district managers, one of whom, Arthur Kelly, became his father-in-law.

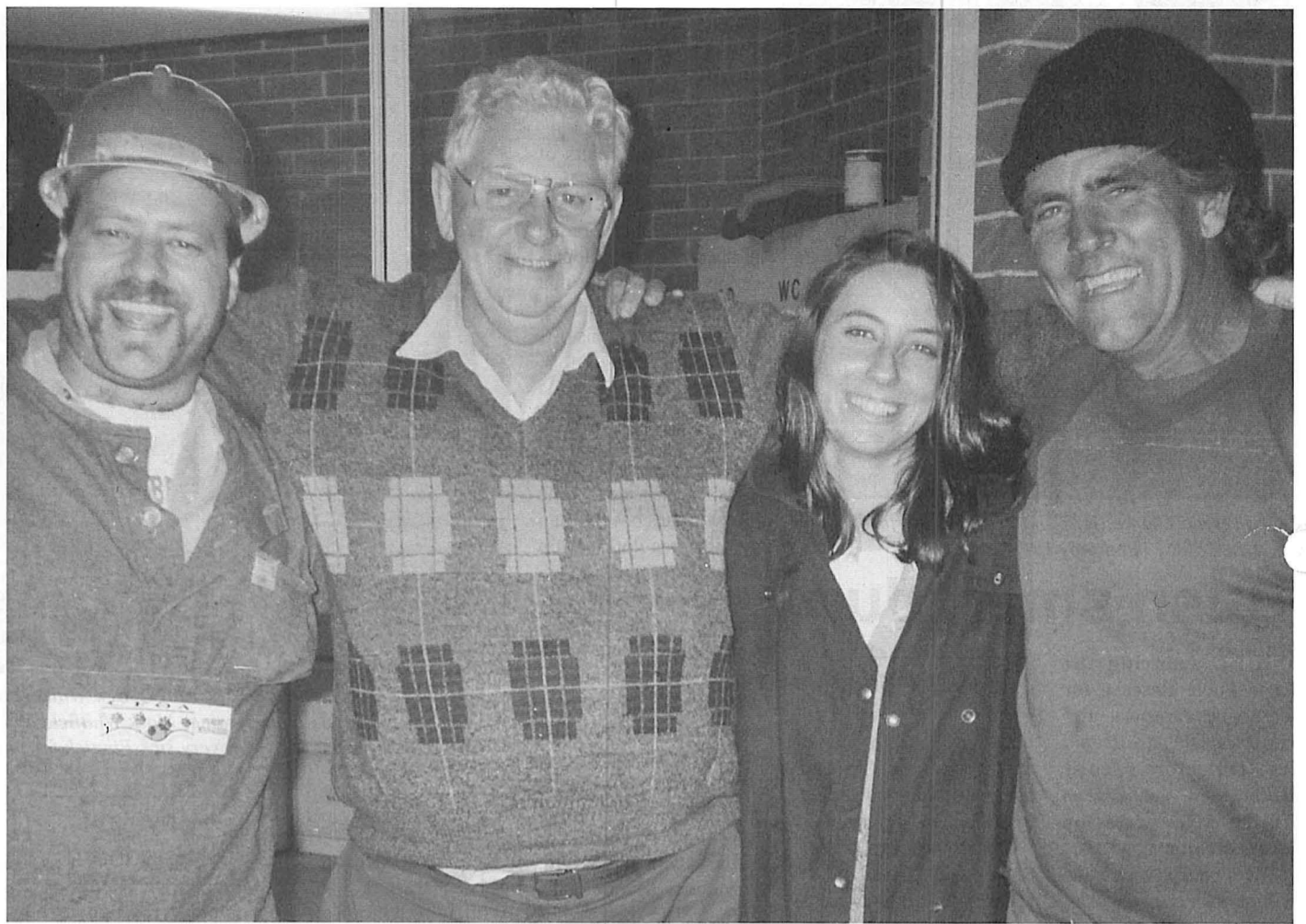
Others were Barney White, Dave Lejeune, Jim Edwards, Eric Jenkins, Don Keene, Jon Murch, Peter Beatty and Alan Seymour; I was privileged to be his last.

Brian also served under conservators Stoate, Wallace, Harris, Beggs and McNamara, and Executive Director Dr Syd Shea.

In his 44 years' service, Brian has never had a day off on workers' compensation, and leaves behind 18 months of accumulated sick leave entitlements.

In private life, Brian is a respected member of the community, having donated his leisure time liberally to sporting and volunteer organisations.

He has audited more books on a voluntary ba-



Left to right forest ranger Luke Bouwman (the new "keeper of the book"), retiring administrative assistant Brian Fitzgerald, forest ranger Joy Borison and forest workman Steve Thomas. Photo by Peter Bidwell.

sis than he can remember.

In August 1988, he was appointed Justice of the Peace. Brian represented Western Australia in 1973 as a member of the State Clay Target Team, taking fourth place at the Grand Australian Handicap in Adelaide.

He was well known for his prowess in football, golf, badminton and other

sporting activities in his younger days.

In 1964, at the age of 30, Brian won the Allen Medal for football in the Central Districts Association.

It wasn't until later years that he turned to restoring motor cycles and is on his 16th machine at present, with four more to go to reach his target of 20 restorations.

His oldest motor cycle is a 1915 Triumph, once owned by his father who sold it more than 30 years ago. Brian tracked it down in 1983 and has since restored it to its former sleek self.

The youngest motor cycle in his 'fleet' is a 1952 AJS, also fully restored.

Brian is looking forward to attending the Bay to Birdwood Motor Cycle

Rally in Adelaide in September and the Pan Pacific Rally in Dunedin, New Zealand next year.

He has been a member of the Indian Harley Vintage Motor Cycle Club for 19 years and has been its president for three years.

When he's not restoring bikes, Brian can be found riding one of these favourites in a vintage road

rally somewhere around the country.

While wife Judy continues with her career as a teaching aide, Brian will move (much to Judy's delight) into the domestic duties arena.

CALM would like to wish Brian all the best for the future and thank him for his many years of dedicated service.

Nurseries to improve economy

MORE than a million eucalyptus-oil-producing mallee seedlings will be distributed through the wheatbelt this winter for planting on farms.

The seedlings have been raised in CALM's nurseries at Narrogin and Manjimup and in private nurseries at Esperance and Kalannie.

CALM'S Wheatbelt regional manager Ken Wallace says the Narrogin nursery is an important source of Western Australian native trees and shrubs for revegetation programs in the South West.

As well as 600 000 oil mallees, about 250 000 seedlings of other species raised at Narrogin will be sold to land conservation district groups, farmers, other Government departments and the public.

The species suit a wide range of climate, from Dalwallinu to Kalgoorlie and from Denmark through to Esperance.

Ken says the nursery also raises local wheatbelt varieties on an experimental and research basis. Emphasis was placed on species with conservation and production potential.

"For example, local species may be sources of timber or produce leaf oils while providing habitat for wildlife," he says.

Western Australia's tree plantings reached a record

22 million seedlings last year, reflecting the big increase in interest in trees for plantations and land care programs.

CALM's Narrogin and Manjimup nurseries alone supplied 18 million seedlings.

CALM Executive Director Dr Syd Shea said the swing towards hardwood plantations and CALM's bluegum breeding program - which has developed the genetically superior western bluegum - had meant bluegums now were the single most sought-after variety.

But in wheatbelt areas unsuited to bluegums, farmers were showing interest in high oil yielding mallees.

Dr Shea said CALM was spending up to \$2 million over the next three years to help wheatbelt farmers establish mallee crops in trials at Esperance, Woodanilling, Lake Toolibin, East Naremben, Kalannie and Canna.

"Revegetation with perennial woody crops is recognised as an important tool in the thrust towards achieving conservation and sustainable agriculture," he said.

"CALM's goal is to develop ways in which farmers can combine these interdependent aims to increase the overall economic and environmental benefits."



Narroginh District senior operations officer Steve Gorton, Wheatbelt Region manager Ken Wallace and Narrogin nursery manager Greg Durell with some of the mallee seedlings being sent out for planting this winter. Photo by Nigel Higgs

Camp for kids a big winner

LEARNING to identify an octopus lair by its empty shell heaps and hearing the creaky voice of the chiming wedgebill asking "Did you get drunk?" were among the activities for children at the second annual Biosphere Camp on Heirisson Prong Peninsula.

The camp was run over three days with leaders and the 19 schoolchildren camped in tents on the western side of the Prong, a short drive from the Useless Loop centre in Shark Bay.

The Years 6 and 7 children were from Useless Loop, Shark Bay, Gascoyne Junction and Tardun primary schools.

CALM's acting supervising wildlife officer for Mid-west region Peter Lambert and mobile ranger Mark True took the children on trips throughout the peninsula, giving them a first-hand appreciation of the areas' ecosystems and conservation values.

Peter led the children on bird observation patrols through dry coastal scrublands, where they saw the white-winged fairy-wren and the chiming wedgebill.

"A highlight of the pa-

by Verna Costello

rol was a visit to a mangrove-lined inlet, where we saw young kestrels in a nest, a mangrove heron and lots of migratory shorebirds such as the bar-tailed godwit and grey-tailed tattler," Peter said.

Mark showed them marine ecosystems such as sand flats and microbial mats, inter-tidal species of flora such as seagrasses and fauna such as seastars and chitons.

"The children were spellbound by the number and rich variety of crustaceans and molluscs," Mark said.

"But one girl was less than impressed when a cockle-shell, closing quickly when it sensed footsteps, shot a jet of water up her leg: 'Yuk, it peed on me!' she said."

Children and leaders alike voted the camp a resounding success and hoped there would be another.

The camp was jointly funded by the Education Department and the Shark Bay Salt Company, and was co-ordinated by Useless Loop Primary School teacher William Davis.

These quiet achieving volunteers are CALM Herbarium's best kept secret

VOLUNTEERS working at CALM's WA Herbarium were among those who had accolades heaped upon them at the recent Volunteering for the Environment half-day workshop held at the Herbarium.

Expanding on his speech at the workshop,

by Verna Costello

acting curator of the Herbarium Neville Marchant said that Herbarium volunteers were like people in any organisation, some highly visible, others less so. "For example, mar-

ried teams Barbara and Bob Backhouse and Gwen and Jack Abbot, who mount specimens for the Herbarium, and Daphne Edinger, who has worked for 12 years almost exclusively with principal research scientist Kevin Kenneally identifying and processing plant specimens,

are among the more 'visible' volunteers," Neville said.

"But we also have our share of quiet achievers like Brian Best, a former curator of bryophytes at the Harare Herbarium in Zimbabwe.

"Brian quietly hides himself away for two days each week in a small area of the Herbarium, classifying mosses and liverworts, while his wife Nora mounts other specimens.

"They are irreplaceable as we've never been able to employ someone with Brian's qualifications and experience.

"In the past two years they've been with us, the Bests have carried out work I'd roughly estimate to be worth \$100 000.

"Rodney van Proctor is another quiet achiever and a gem of a woman who can be called upon to roll up her sleeves and do any of the multitude of herbarium tasks.

"At present, she comes in two days a week to mount and label the thousands of wildflower specimens from a collection be-

queathed to CALM by the late Ken Newbey.

"Whether volunteers are highly visible or quietly beaver away in a corner down one of the labyrinthine corridors of the Herbarium, each one of them makes a valuable contribution.

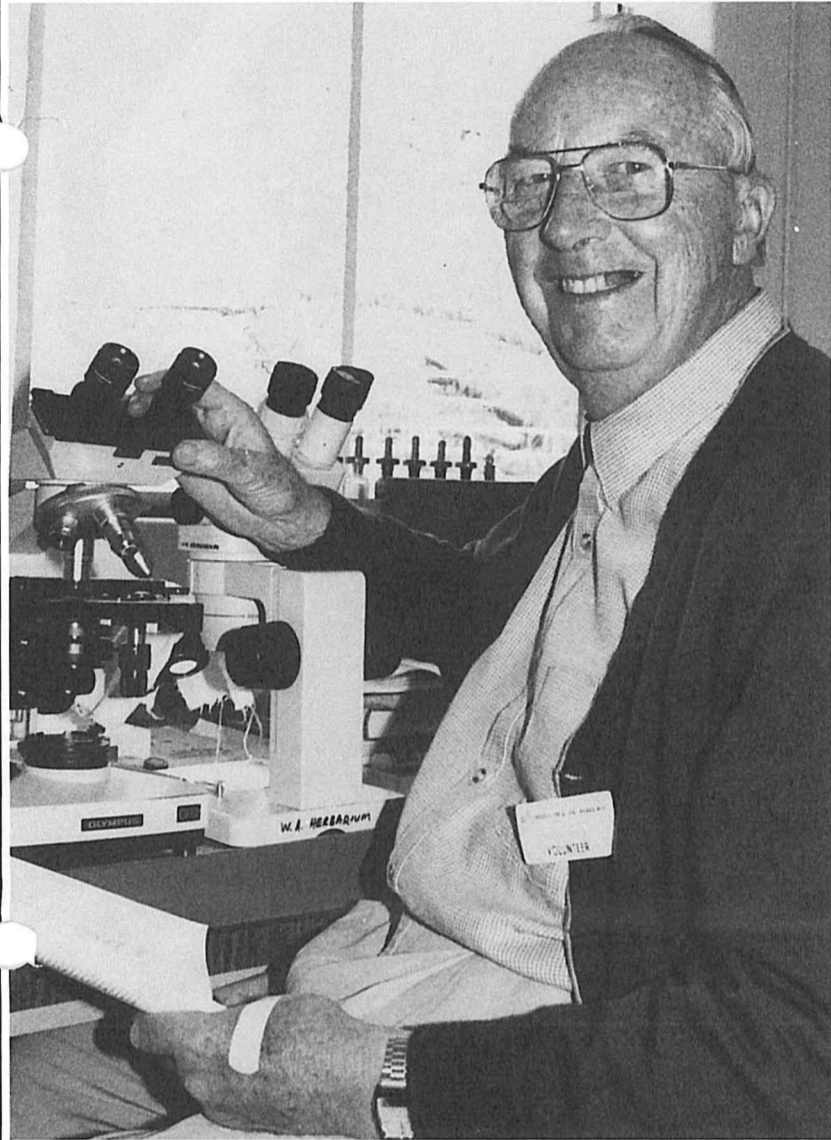
"They can come in all age groups, with or without relevant qualifications, and for varying lengths of time and frequency.

"For example, Daphne Edinger works a five-day week, while others come in one or two days a week; Roger Hilton, curator of the fungi collection, comes in once a month.

"We even have 85-year-old twins Barbara and Marg Evans, who spend half-a-day a fortnight helping out.

"Much depends on volunteers' other commitments, but no matter how infrequently a volunteer comes in, there's always one or more tasks begging for attention."

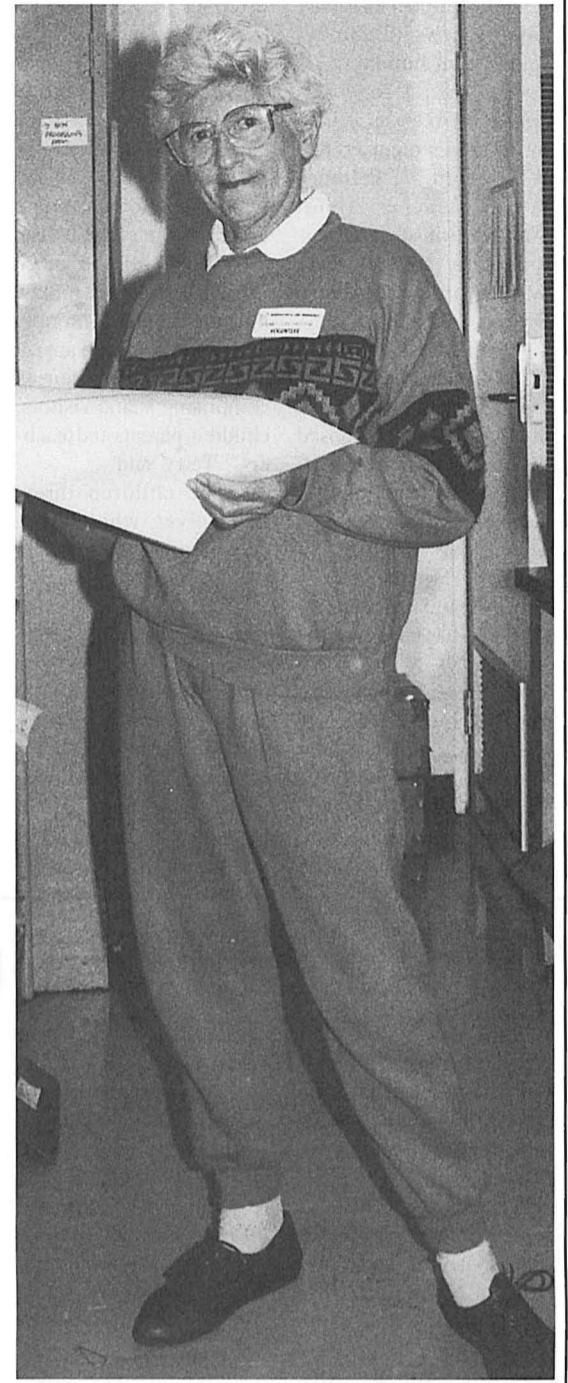
If you know anyone wishing to do voluntary work with the Herbarium, contact the Manager of Collections Chang Sha Fang on (09) 334 0504.



Left: Doing what he does best - is Brian Best.

Below left: Daphne Edinger.

Right: Rodney van Proctor. Photos by Verna Costello



Esperance farmers keen on growing gums and mallees

ESPERANCE has tremendous potential for producing wood fibre and the region's farmers are showing enthusiasm for bluegums and oil-producing mallees.

CALM executive director Dr Syd Shea and vegetation and tree planting advisory service principal researcher John Bartle, recently visited the district to discuss tree crops with local farmers.

Dr Shea said he was impressed with the enthusiasm local farmers were showing for tree crops.

"Their attitude is extremely encouraging as local support will be crucial to the development of a wood fibre industry in the region," he said.

Dr Shea said Esperance had excellent infrastructure to support wood exports. Its port facilities were first class.

He also was impressed with the growth of the bluegum plantations he visited.

"They are doing very well with growth rates above expectations despite the long summer drought," he said.

CALM will work with the South Eastern Agro-Forest Co-operative and the South East Forest Foundation to help farmers who wanted to establish bluegum plantations.

He already had committed CALM resources to assist with selecting planting sites and advise on

planting practices.

It was expected that within two years a major investor could be attracted to enter joint-ventures to help farmers finance planting and provide markets for woodfibre.

"CALM's experience in the Collie and Albany districts has opened the way for local farmers to integrate bluegums into their farming operations, while at the same time enhancing existing pursuits such as livestock grazing or cropping," Dr Shea said.

"In these districts, joint ventures have been formed with two of the biggest woodpulp users in Japan and Korea, so there definitely is solid interest in Western Australia as a

wood fibre supplier."

Esperance also is one of six sites CALM has nominated in the wheat-belt for the initial commercial development of 'euc-oil'.

The aim is to plant mallees over 5000 hectares within a 30km radius of each site. These plantings will provide a base of experience and production from which to develop the industry on a bigger scale.

Australia currently imports 3000 tonnes of euc-oil a year, mainly for pharmaceutical use, but research by CALM, Murdoch University and Alcoa of Australia has shown it has extensive applications in industry, particularly as a solvent.

Bluegums bolster fire resources

VOLUNTEER FIRE-fighting resources in the Collie and Napier districts are being upgraded with the help of income earned from CALM's bluegum joint ventures.

CALM is providing heavy duty units to the local volunteer bush fire brigades as part of the Department's overall fire

management strategy.

The units are being funded through fees CALM earns from managing bluegum plantations on behalf of the Japanese joint-venture, Albany Plantation Forest Company and the agreement with the Korean company, Hansol Forest Products.

CALM's Collie district senior operations manager

Glyn Yates said bluegum plantations don't pose an added fire risk to surrounding farms and bushlands, but they were a huge commercial investment that needed protection from fire.

Also, local volunteer brigades were under constant pressure to upgrade equipment and maintain standards of fire protec-

tion, and CALM recognised that these brigades could not be expected to do this on their own.

The \$25 000 units are being built at CALM's Collie workshops.

CALM will train brigade members in the use of equipment to ensure that high standards of fire-fighter safety are maintained.

Jarrahdale's holiday program a great hit

A PLAY with a conservation message enacted outdoors by primary school children received rave reviews in the recent school holidays.

The play, *Penguin Island 2000 AD*, was written by CALM volunteer and Winterfold Primary School teacher Heidi Sommer-Stinson and performed by children from Winterfold Primary School.

Heidi's husband David 'Jump' Stinson, also a CALM volunteer, wrote the lyrics and composed the music, which he performed alternately on guitar and keyboard.

The play is set in the year 2000 when a balance between land use and conservation has become a hot issue.

Audiences saw the young actors as animals, aliens and humans squabbling over who should have control of the Island.

As the play unfolds, a court case develops, with

the audience also taking part as members of a jury that gives its verdict after listening to the prosecution, the defence and witnesses.

Shoalwater Islands ranger-in-charge Terry Goodlich said the play was an ideal way to get the conservation message across to the community.

"It had all the more impact because it took a non-threatening, humorous approach, much appreciated by the audiences comprising island visitors, children, parents and teachers," Terry said.

"The children threw themselves wholeheartedly into their parts, and were brilliant.

"The feedback I've had from parents and teachers is that not only did the children learn valuable conservation lessons through their role playing, but the opportunity to act and experience a positively responsive audience raised their self-

esteem sky high.

"We staged three performances and it was, without a doubt, the most popular activity of the Shoalwater Islands holiday program, which was organised by CALM's Jarrahdale district staff."

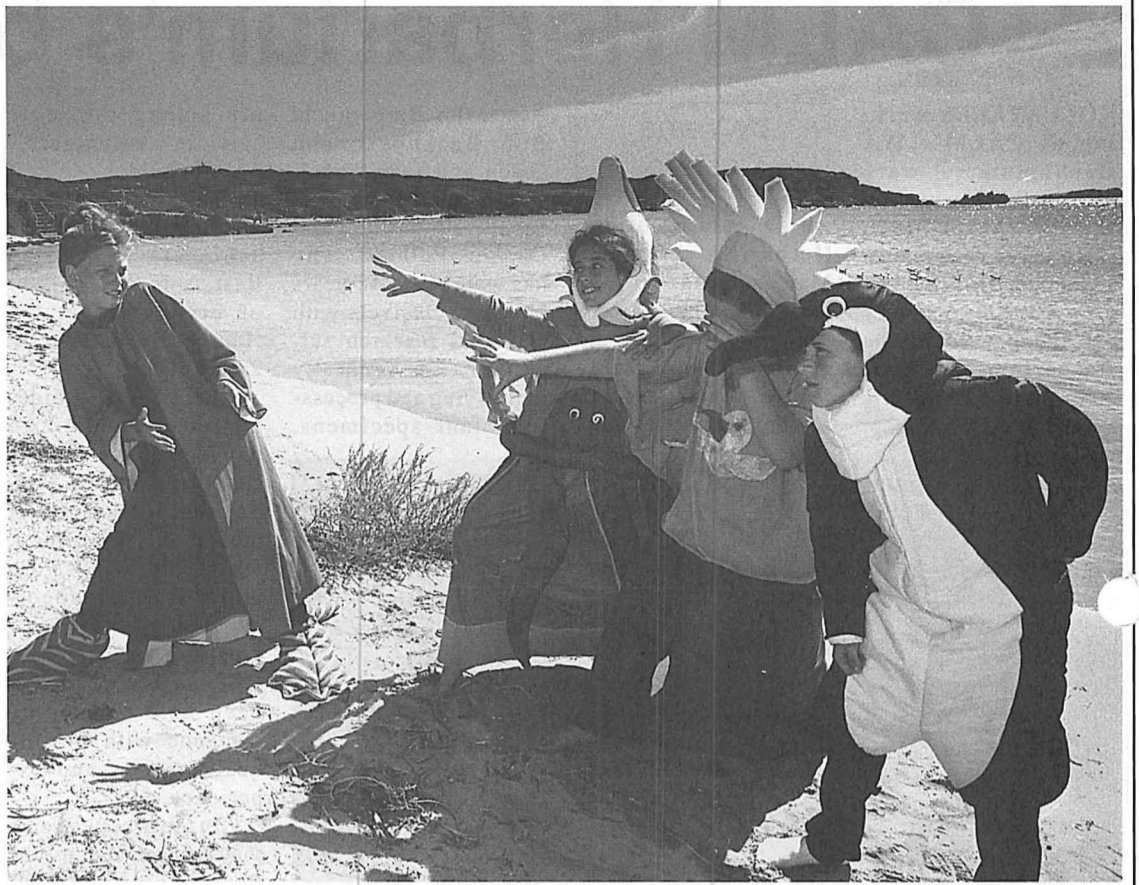
This success was repeated when the children staged a special performance for the rest of the school and parents and teachers who had not seen it at Penguin Island.

It will be performed also at the Priority Schools Program Teachers' Conference on June 22.

Other holiday program activities included a sandcastle competition for children and guided tours conducted by CALM volunteers.

"The program was a first for Shoalwater Islands, with profits going to the Shoalwater Islands Trust Fund," Terry said.

For further information, contact Terry Goodlich on (09) 592 5191.



Giving 'The Alien' Michelle Zdrzynski (left) the 'evil eye' are, (centre to right) Diana Riccardi, Heather Jones and Murray Persichello. Photo by N. Mulligan.

More park surveys needed

A RECENT visitor survey of Nambung National Park has produced some interesting ideas on future developments in the area.

The survey attracted a 70 per cent response rate, with 61 per cent from interstate or overseas visitors, many of whom came from Europe, including the United Kingdom; New Zealand; South East Asia; Japan and Canada.

Ninety-one per cent of respondents claimed they

had "enjoyed their visit very much".

Survey co-ordinator Luisa Liddicoat said that of the many superlatives used by 89 per cent of the respondents to describe the Pinnacles "awe-inspiring," and "far more impressive than photos I've seen," were only two.

"Fifty-five per cent of respondents recorded a 'no' to the question asking whether there should be provision or improvement of facilities or services in the park," Luisa said.

"From those who wanted improvements, the main comment referred to the poor condition of the access road."

The Nambung National Park is only one of the CALM-managed areas throughout the State that is being surveyed.

"So far, I've received completed survey forms from 16 parks and forests, but I'd like to hear from other regional and district managers who would like to take part," Luisa said.

"Because people on

holiday don't want to spend a lot of time poring over several pages of a questionnaire, we now have a single, folded A4 size 'Comment Card' that's handed to visitors for completion.

"Results are then returned to me at Pinnacle House, where they are computer-processed for preliminary results and report."

Further information is available from Luisa on (09) 364 0777 or fax her on (09) 364 3192.

Justine heads for Busselton

MEET research scientist Justine Edwards, a recent addition to CALM's Science and Information Division.

Justine will be based in Busselton, in a position funded by the National

by Verna Costello

Landcare Program, until June 1997.

Her goal is to improve the survival rate of trees on

farms so as to encourage landowners to establish them as an effective means of land rehabilitation.

As tree survival can be improved through accurate site selection, Justine will develop guidelines for different tree species.

To do this, she will study the site and climatic characteristics that influence the survival and productivity of *Eucalyptus globulus* and other commercial tree species.

The research findings will also be of value to commercial plantations.

Research scientist Richard Harper, who recently began research on site selection for *E. globulus* following similar work on pine plantations, will supervise the position filled by Justine.

Justine was offered five other professional positions, but said she chose CALM because it offered her the potential to contribute practical benefits for the farming community and, ultimately, to improved land conservation throughout the South West.

"Also, being associated with CALM's high stand-

ards of research in the management of sustainable resources was appealing," she said.

"I was raised on a farm east of Albany, so I have a strong affiliation with the farmer's perspective.

"This has made me keen to seek practical solutions to current problems."

Richard said Justine's practical outlook and her high level of motivation were invaluable.

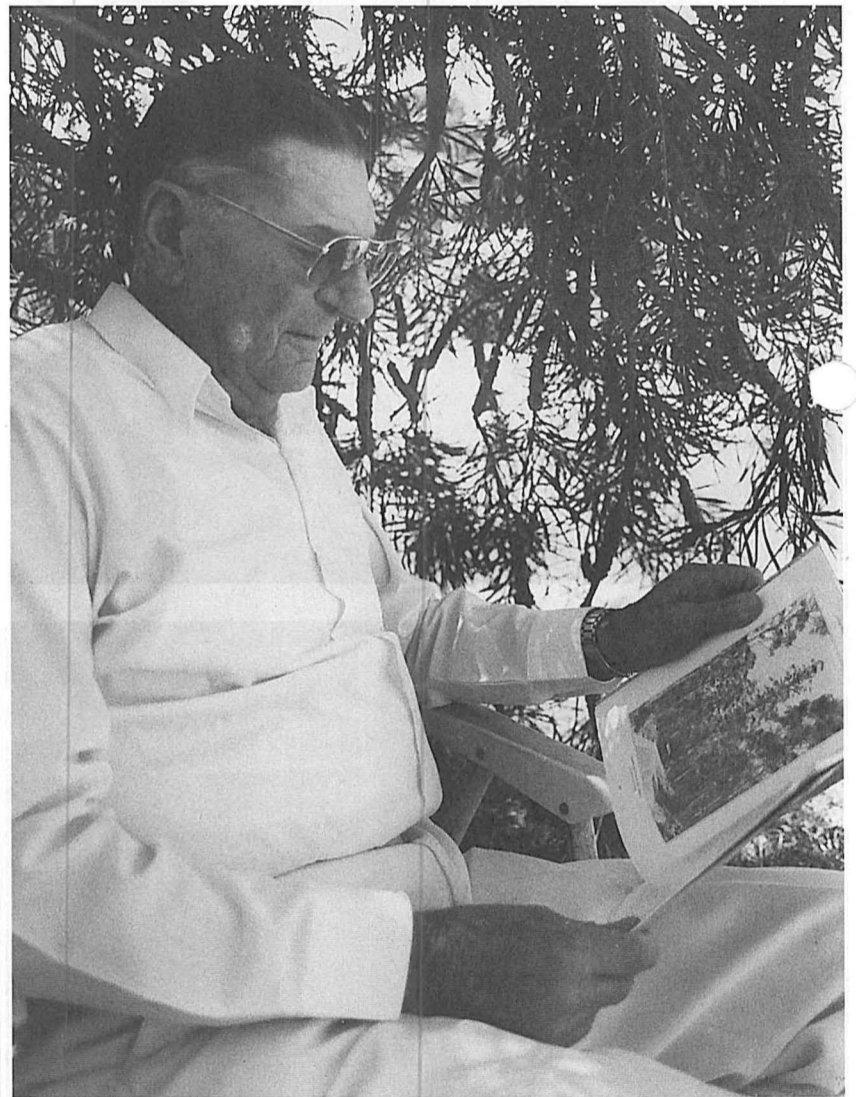
"These, combined with her Honours studies of the interaction between soils, hydrology and plantation design, place her in a strong position to make a significant contribution to the problem of improved site selection for *Eucalyptus globulus*," Richard said.

Justine completed a Bachelor of Environmental Science with first Class Honours from Murdoch University in 1993.

Her Honours studies were carried out with Dr John Marshall of the CSIRO, and examined the role of *E. globulus* for land rehabilitation in the upper Kent River Basin, near Mount Barker. Justine intends to further these studies with a PhD.



Research scientist Justine Edwards. Photo by Verna Costello



A delighted Ted Hards with his copy of Lookouts of the Karri Country. Photo by Verna Costello

Ted reviews a book

RETIRED fire spotter Ted Hards (above), of Carlisle, was immaculately dressed in bowling creams and about to set off for a lawn bowls pennant match when he received his copy of *Lookouts of the Karri Country*.

Waiting for a fellow bowler to call, Ted took the opportunity to browse through the book and was delighted to find a photograph of Mount Frankland lookout tower, the scene of his fire-spotting days in the early 1960s.

Ted said the photo showed a much later

version of the tower. "There were no handrails, steps or ladders in my day," he said.

"You had to scramble up the best way you could and the tower itself wasn't glassed in - it was wide open to the elements."

Ted and his late wife Sonia had two daughters and two sons and he recently became a very proud, great-grandfather of a boy and, two weeks later, a girl.

When he isn't playing bowls, Ted likes to fish, preferably from a boat anchored a few

hundred metres off south beach, where he claims "there's King George whiting, skippy and herring in abundance."

"It's a hard life, but someone's gotta do it," said Ted.

Lookouts of the Karri Country, written by former long-time Warren district identity Dave Evans and published by CALM, was featured in the November 1993 issue of CALM NEWS. The book is available from Como front counter at a staff discount price of \$11.95, (rrp \$14.95).