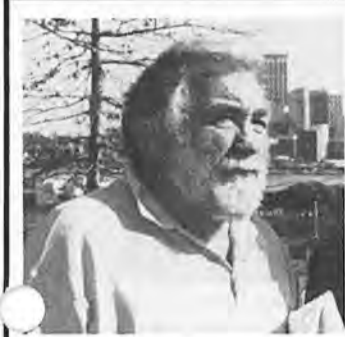


CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

October-November 1992



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CALM researchers Graeme Liddelow (left) and Per Christensen radio-collar a burrowing bettong, shortly before releasing it into the Gibson Desert. (See Desert dreaming on page three). Projects such as this will be among the concerns of the new WA Threatened Species and Communities Unit.
Photo by Ray Smith

New threatened species unit

CALM's Threatened Species and Communities Unit (WATSCU) was officially launched at Julimar State forest on September 18.

To coordinate and promote

WATSCU has been set up to coordinate and promote the conservation of threatened species and ecological communities.

The Unit consists of three scientists working half time and two full-time administrative support staff.

It will work closely with all CALM staff involved with threatened species and communities and with other organisations and the public.

It is headed by Andrew Burbidge, until recently CALM's director of research, whose involvement with threatened species goes back to 1963 when he began studies on the western swamp tortoise.

Impressive credentials

He is a member of the Commonwealth government's Endangered Species Advisory Committee, a regional member of the Species Survival Commission of IUCN (The World Conservation Union), Chair of the Species Survival Commission's Australasian Marsupial and Monotreme Specialist

Group and a member of its Freshwater Turtle and Tortoise Specialist Group.

In WATSCU, Andrew will concentrate on threatened animals.

John Blyth will concentrate on threatened ecological communities.

Until recently John was a scientific adviser to CALM's director of nature conservation and was responsible for preparation of CALM's Draft Nature Conservation Strategy.

Experienced biologist

John is an experienced conservation biologist with a background in freshwater ecology and is currently Chair of the Western Australian division of the

Royal Australasian Ornithologists Union (RAOU).

Andrew Brown, who will be the Unit's expert on threatened plants, has a wealth of experience working with the State's flora.

Ten years experience

He is co-author of *Western Australia's Endangered Flora* and *The Orchids of South-Western Australia* and has worked on flora conservation in CALM for more than 10 years.

The Unit's support staff are executive officer Hugh Clift (formerly CALM's senior librarian) and secretary Jill Pryde.

Million dollar new program

by Verna Costello

A \$1 MILLION program will offer Perth residents guided bushwalks, a viewing platform at Penguin Island, a new swimming beach at Matilda Bay Reserve and upgraded facilities at key recreation sites around the city.

The recently launched Perth Outdoors Program, aims, over the next three years, to encourage city and suburban residents to make better use of local recreation sites.

State government funding will enable CALM to carry out major redevelopments at many of Perth's already popular, and some less well-known, recreation sites.

- Works will include:
- ◆ the creation of a swimming beach, restoration of jetties, new toilets, picnic facilities, signs and information at the Matilda Bay Reserve;
 - ◆ an activity centre and camping site in the Hills Forest, near Mundaring;

- ◆ a visitor centre, interpretive displays and extensive landscaping at Yanchep National Park;
- ◆ major redevelopments in Shoalwater Islands Marine Park (see *Shoalwater upgrading* below).

Book release

To encourage people to take advantage of these and other facilities, *Perth Outdoors*, a book listing nearly 300 recreation sites in and around Perth has been prepared for release.

CALM will expand its successful Go Bush school holiday activities to offer more ranger-led programs to help children and adults learn about WA's unique wildlife.

The Department will also run nature-based projects for those interested in learning more about Perth's natural

environment and will promote camping and associated activities, such as bush-walking and night time spotlighting for animals.

Some of these activities will be guided, such as the Aboriginal bush tucker walks at Yanchep National Park, but families will be encouraged also to venture into the bush to camp and explore nature.

Perth Outdoors is expected to lead to an increase in day and night time ecotourism by promoting nature appreciation.

The many new facilities will allow CALM and tourism operators to run a broad range of programs from whale-watching to bird-watching at wetlands, and spotlighting animals in the forest.

Future projects will include work at John Forrest and Serpentine National Parks and Lane Poole Nature Reserve.

See pages 4 and 5 for more on the Perth Outdoors Program.

Shoalwater upgrading

SEA-LIONS and penguins will be given further protection under a new management plan for the Shoalwater Islands, near Rockingham.

An estimated \$250 000 will be allocated under the recently announced Perth Outdoors Program, to help implement the plan.

The Shoalwater Islands Management Plan was prepared by CALM on behalf of the National Parks and Nature Conservation Authority.

The plan includes protection of nesting bird habitats and beaches frequented by Australian sea-lions, as well as plans to meet the needs of visitors while minimising the impact of visitor activities.

Announcing the Plan, former Environment Minister Bob Pearce said the

islands were Perth's most ecologically significant and heavily visited island chain.

"Penguin Island, the largest, is a popular tourist destination, with up to 70 000 people visiting the island each year," Mr Pearce said.

"It also supports the largest breeding population of fairy, or little penguins on the west coast of Australia.

"Nearby Seal Island is closed to the public to safeguard the Australian sea-lion, a specially protected species, which uses the island as a resting site.

"About 50 species of bird also use the islands and these include migratory species protected by international treaties."

Mr Pearce said the Management Plan encouraged

appropriate research on these species and their nesting, feeding and breeding habitats and limited public access to specific areas.

The Plan recommends that the number of buildings on Penguin Island be limited to increase potential penguin nesting sites.

Funds from the Perth Outdoors Program will go towards:

- ◆ building raised boardwalks on Penguin Island to allow visitors to view nesting sites without disturbing them;
- ◆ removing derelict and remnant building materials from Penguin Island;

continued on page 2



I AM currently reading an interesting book on Augustus, one of the early Roman Emperors who, for at least part of his reign, was presiding over a disintegrating Roman Empire.

Coincidentally this week, I listened to Mr Paul Terry, a successful West Australian businessman and proprietor of the Esplanade Hotel in Albany, give an overview of his assessment of the world economic and political situation to a conference of agricultural consultants.

I couldn't help being struck by the similarity of Emperor Augustus' analysis of the Roman Empire situation and Paul Terry's analysis of what's going on in the world today.

It may sound pretentious to talk about CALM's situation with respect to world events, (although we do manage an area equal to half the size of Japan) but the point is that we are working through a period of considerable economic and political turbulence.

The last four weeks, of course, have been particularly difficult.

The unexpected resignation of Bob Pearce has compounded the problem. Our new Minister, the Hon Jim McGinty, Member for Fremantle, in the middle of a very difficult parliamentary schedule, has to pick up a highly complex and controversial portfolio. Unfortunately, too, Bob Pearce's resignation occurred in the middle of the statutory review of our forest management plans.

You may have also noticed during the last few weeks that CALM has been the subject of a systematic public attack from some members of the conservation movement on issues, such as the forest plans, prescribed burning and the new expansion of the softwood sawmill at Dardanup.

Contrary to what you may have been told, the absence from the field of people who 'live' in Crawley is not because we are on holidays or we have died - we have just been frantically busy.

Emperor Augustus observed, during his turbulent period of reign, that it was impossible to anticipate events, so he never had a set plan to deal with the future.

His approach was to have a plan in place which enabled him to change rapidly as events unfolded, while at the same time consistently delivering improvements in government and administration.

Notwithstanding the turbulence we are experiencing, I only have to look at this issue of CALM News to see that we are delivering highly significant improvements in all the areas for which we are responsible.

You, like me, when you read CALM News may be struck by the contrast with what we read in the daily newspapers. But we should remember those words from one of John Williamson's beautiful songs: "Good news never made a paper sell!"

Dr Syd Shea, Executive Director

Continued from page 1

♦ establishing interpretive displays on the penguins and other birdlife.

A major interpretive display will also be established at the Mersey Point Centre in association with the Shire of Rockingham.

The visitor centre is expected to be an important focus for visitors to Rockingham and Warnbro Sound.

Mr Pearce said the thrust of the Plan was to develop the islands' tourist potential by ensuring that the conservation values, which attracted visitors, were protected.

Helpful Endeavour

A LITTLE bush know-how has helped the people building a replica of the Endeavour to save thousands of dollars.

The project began as a gift to the nation from businessman Alan Bond.

The vessel is being built from jarrah using traditional techniques.

CALM officer Ralph Smith said the Endeavour shipbuilders needed 46 large, angled pieces known as 'knees' for the quarter-deck.

"Before the project ran into financial difficulties, they were using specially manufactured knees, but they cost several thousands of dollars each," Ralph said.

"To save money, they decided to search for a

natural alternative. "However, it was no easy task to find so many large timber knees.

"Suitable pieces of jarrah could be found only where the limbs grow from the crown of the tree, but they had to be at an appropriate angle and the right size.

"As well, the timber had to be taken from areas accessible only under strict dieback hygiene restrictions.

"Fortunately, CALM officers were able to show them timber that met these requirements in three areas, primarily at Jarrahdale and Dwellingup. To avoid using vehicles and thereby minimise the risk of spreading dieback, the Endeavour people carried the knees out by hand," Ralph said.

Shark Bay flora workshop

AN OFFER from a participant to help develop a Shark Bay District herbarium was just one outcome of the flora workshop held in the proposed Francois Peron National Park in September.

Fifteen Shark Bay residents, tour operators and local CALM staff attended the workshop held at the Peron homestead in the Park where five young hand-reared kangaroos and an assortment of human visitors dropped in throughout the day.

During the walk, Acting Director of the WA Herbarium, Dr Neville Marchant and District Manager Ron Shepherd delighted participants with their good-natured sparring, challenging each other to on-the-spot identification of plant specimens.

The end result was a greater understanding by all involved of the diversity of the Shark Bay flora and an enthusiastic interest in the establishment of the herbarium.



Local Nyoongars address participants in public workshop on Stirling Range and Porongurup National Parks management plan. They are from left Ken Dean, Syd Penny and Jack Williams. Photo by Martin Lloyd

Mountain workshop

THE most critical management issues in the Stirling Range and Porongurup National Parks are dieback, fire, protection of flora and fauna, and visitor management and facilities.

These were the findings of a recent public workshop hosted by CALM as part of the community involvement program working towards preparation of a draft management plan for the two parks.

The workshop was chaired by regional planning officer Ian Herford assisted by planning officer Kate Orr.

Also from CALM were Albany District manager Kelly Gillen, senior ranger

Martin Lloyd and Park rangers Neil Scott, Tony Smith and Allan Rose.

A total of 59 people attended and included representatives of park neighbours, Aboriginal organisations, friends groups, conservation groups, recreationists, the tourism industry, the military and local shires.

Also in attendance were members of the Planning Advisory Committee for the Stirling Range and Porongurup National Parks who helped organise the day.

The workshop was opened by Jim Sharp representing Director of Parks, Recreation, Planning and Tourism Chris Haynes.

The morning session consisted of a series of short presentations by participants, who covered issues such as Aboriginal cultural use, tourism, adventure activities such as rockclimbing, bushwalking and paragliding, access for the disabled, and

military training exercises.

Speakers told participants of the nature of their use of parks and their ideas on future park management.

In the afternoon, the participants broke off into smaller groups to consider each park separately, with Planning Advisory Committee members facilitating each group.

The major issues were found to be the same in the two parks.

Group members then wrestled with the formulation of management objectives and discussed the options available to achieve them.

The threat of spread dieback disease and resource shortages appeared as major constraints on the available options.

A report on the workshop will be used in the drafting of the management plan by CALM and the Planning Advisory Committee which comprises 15 local people.

THE EDITOR...LETTERS TO THE EDITOR

Dear Sir/Madam, I would just like to express my thoughts on a camping trip that my family and I have just returned from.

The campsite we stayed at was at Gooralong Park near Jarrahdale.

Upon arriving we found that the main camping area was too crowded for us so we moved over to what is known as the group camp area, after getting the directions from an elderly

couple sporting a couple of your volunteer badges. We set up camp in this area with our two dogs and our daughter.

A little while later a group of what I would call "hooligans" arrived and set up camp close by.

This group proceeded to light a very large bonfire which was a little frightening due to the closeness of all the trees in the area, then they turned on very loud music and went on a drinking binge.

All this was very worrying for us and, as they had three large Bull Terriers that attacked our two dogs and terrified our little seven year old, we were just about to pack up and go home.

Then one of your rangers came by, and asked the group to put out the fire and to calm down a little. He was met by a lot of abuse from these revolting people and I'm sure you can imagine what sort of language was passed around.

He left about ten minutes later, but on a regular basis both he and the local police drove by all night.

Although the noise of the music and their yelling kept us awake all night, the knowledge that your guys and the police were out there made things a lot easier to take.

At 6.00 am the next day we noticed the group pack up and leave, which I believe was as a result of some very good and necessary patrolling by your rangers and the police.

We then went on to have a lovely stay in the park and were sad to leave to come back to Perth.

I wish to congratulate your department on having such efficient, friendly and conscientious staff.

One suggestion that may help to keep the rough types out would be to maybe charge a nominal entry fee to camp. I understand how difficult it must be to keep track of everyone in such a large area and I'm sure you don't have an unlimited supply of men, so many thanks to your staff and the local police for a great stay.

Keep up the good work.

Yours faithfully,
Cherie'lee Harlow

STAFF NEWS

Appointments

Gemma Sgherza, Officer, Nannup; Ann Iacopetta, Officer, Kirup; Ian Gale, Forest Ranger, Mundaring.

Promotions

Brian Moss to Forester Grade 1, Manjimup District; Peter Hollings, Microcomputer Support Officer, Information Systems, Como; Greg Leaman, Regional Manager, Greenough/Gascoyne, Geraldton; Greg Lange, Senior Forester, Dwellingup. Promotions to other Departments - Vicki Morgan, Albany to Corrective Services; Tanya Maxted, Corporate Relations to Agriculture.

Transfers:

Bill Evans, Park Ranger, to Nambung; Sharon Hann, Officer, Albany District.

Retirements:

Ron Waterhouse, Recreation Officer, Mundaring; Bill Adams, Senior Forester, Mundaring.

CALM Classified

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

CALM NEWS,
Corporate Relations Division

For Hire

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

Wanted

Office safe. Small to medium size. Contact Melissa Ford Katanning (098) 211 296.

Chairs in very good condition. Preferably ergonomic or similar. Contact Lynne Oakes, Dwellingup 538 1078.

Electric typewriter, preferably Olivetti ET 111 or similar, in good condition. Contact Taryn, Store, CALM Dwellingup. Ph: (09) 538 1078.

For Sale

Photocopier/Printer - Xerox 4045 - basic functions. Working condition. All reasonable offers considered. Contact Joanne Currian, ISB, Como (09) 367 0257.

Cafe Bar - Series 6A. Very good condition. New hot

water element. Coin operated. Facilities for tea, coffee, chocolate, milk, sugar, soup. Make an offer! Contact Lynne Oakes, Dwellingup 538 1078.

Bommac Heavy duty drill press. 3/4 HP motor. 5/8" - 16 mm capacity. 2 yrs old. \$200 ono. Contact Steve Toole, Katanning (098) 211 296.

Surplus Equipment

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

CALM NEWS - OCT-NOV 1992

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

Desert dreaming

IT WAS an emotional moment as the plane came in to land at the remote Hussar air strip in the Gibson Desert with our load of 40 boodies and 40 golden bandicoots from Barrow Island.

After years of planning and preparation and the setback in May when the desert was flooded delaying the release, we had finally arrived.

Exciting project

This exciting research project to investigate the reasons for the disappearance of so many of the animals of the central deserts got under way on September 11 with the release of the animals into their temporary holding pens.

Aboriginal elders from the communities at Wiluna and Leonora were brought in to participate in the historic release. They seemed not to recognize the boodie but became excited when they saw the bandicoots which they immediately recognized and remembered as being kuka pulya (good meat).

In good health

The project got off to a good start with all animals arriving in good health. The boodies were released into warrens which are still present in the hard calcrete (a limestone rock) of the hills and the bandicoots appeared under the nearest spinifex clumps.

Already on the first morning of the release a boodie was out of the compound and trying to get back in. A magnificent rugby tackle (for an

by Per Christensen

ex-footballer!) by Neil Burrows finally brought to an end a long chase round the perimeter fence and the boodie was returned safely to the warren inside.

On the second morning two of the boodies' mates were out - we got the message - they wanted out, so we opened the fence on the third night.

Neither the boodies nor the bandicoots paid much attention to the supplementary food we had provided. They immediately started foraging and digging for their own food from the very first night.

Paying volunteers

A week after the release the CALM team was joined by 20 paying volunteers on the first LANDSCOPE Expedition. They assisted in radio tracking, searching for signs of animals having moved location, pit trapping for small animals, adding to the bird list, and amassing an impressive collection of 250 plant specimens.

The LANDSCOPE Expedition is an important part of the whole project. It is hoped that when the initial funding by WAPET and the Australian National Parks and Wildlife Service (ANPWS) predator control dries up, further expeditions may raise funds for continuing management of the new colony of animals.

After six weeks of continued monitoring the project is going well.

Animals have demonstrated their ability to feed themselves in the new environment and are selecting their preferred habitat.

New locations

The bandicoots have moved to new locations in dense spinifex up to two km from the release site. Some of the boodies still occupy the original release warren but others are expanding to other sites nearby.

They foraged up to two km away at night and tracks of one individual were recorded six km from the release site.

Weighing recaptured animals shows that the bandicoots, in particular, are putting on weight.

The animals are also breeding and two boodie joeys have already left their mothers' pouches to fend for themselves.

Most of the bandicoots, few of which had young when they left Barrow Island, are now carrying young.

Predator control has been largely successful with good control of foxes.

Feral cats are the major concern; they have taken six of the 80 animals, (all boodies) released so far.

Monitoring

Renewed effort is being put into cat control and further monitoring during the summer months will tell whether or not the new colonies can cope with the level of predation being experienced.

It is hoped that breeding will outstrip the losses, as happens in successful natural populations.



Left to right, David Bellamy and former Minister for the Environment Bob Pearce congratulating Paul Orchard (ICI Australia State manager) and Daryl Duxbury (Paddy Pallin) on sponsorship initiatives in the Hills Forest. Photo by Jeremy Dunnette

Successful push for funds

EARLY in 1991, CALM embarked on a program to attract funds and resources outside normal State government allocations.

These funds and resources include Federal and State government grants, independent grants from trusts and foundations, sponsorship, partnership and cost-share schemes, donations, fundraisers and bequests of gifts and money.

Sources investigated

Over the past 12 months each of these sources was investigated both locally and internationally by community involvement coordinator Colin Ingram.

Colin had been seconded to investigate and develop policy and guidelines where necessary to support current and proposed projects or programs.

With some sources, such as Commonwealth grants, CALM fared exceptionally well, due mainly to the efforts of several applicants seeking specific grants, presenting well-supported submissions. Other sources, especially sponsorship, showed great potential.

Before pursuing the sponsorship option, Colin

carried out research to determine corporate attitudes to CALM, to sponsorship, and to sponsorship of conservation projects in particular.

Encouraging response

"The response was very encouraging despite the current economic climate and revealed that the corporate community perceived CALM in a positive light, with sponsorship of several specific projects showing every possibility of success," Colin said.

The final stage of the research involved the presentation of three CALM projects to eight companies.

This stage also proved fruitful, with three companies agreeing to sponsorship deals. A report on the entire research project including presentations is available from Colin, telephone (09) 364 0777.

The External Funding Policy and Associated Administrative Guidelines have been endorsed by Corporate Executive and are now being distributed with a Report on CALM External Funding Initiatives.

Recent or current sponsorships include:

Gascoyne Trading with sponsorship in kind, providing transport of the tourist boat Miss Geikie II from Albany to Fitzroy Crossing.

CALM's sponsorship commitment is now complete, following extensive publicity; the unveiling, by CALM Executive Director Dr Syd Shea, of a plaque at Geikie Gorge to commemorate transportation of the boat; and his presentation of framed artwork of the plaque to Gascoyne Trading.

Ansett Australia provided transport for four koalas, and a wildlife officer to care for them during their trip from South Australia to Perth. Stage two of the Yanchep recolonisation program will commence shortly.

ICI Australia has agreed to support the Hills Forest Program with \$5 000 a year for four years to sponsor a forest education program for primary school students.

Paddy Pallin, the camping equipment company, will sponsor a Hills Forest Program, (Go Bush) with \$5 000 worth of camping and bushwalking equipment.

The aim of the program is to introduce people to the basic requirements for safe

and enjoyable camping. **Alcoa Australia** sponsorship, organised by Albany District, is in the form of conveyor belting to be re-cycled into the construction of tracks for four-wheel-drive vehicles.

This is part of a sand dune rehabilitation project, towards which funds from the Contract Employment Program for Aborigines in Natural and Cultural Resource Management are also being used.

LandCorp, the operating arm of the WA Lands Authority, is sponsoring completion of renovation work on McNess House and landscape planning works for the McNess precinct to a total value of \$75 000.

Cable Sands (WA) Pty. Ltd., has agreed to fund the Nannup District with \$6 000 towards a trapping program of small mammals near Lake Jasper in D'Entrecasteaux National Park.

The aim of the program is to discover existing population numbers of small mammals in the area.

Results will be available to both Cable Sands and CALM. Sponsorship was negotiated with Cable Sands by Nannup District manager Roger Banks on behalf of CALM.

CALM beyond 2000

IN recent weeks, CALM has featured twice in the popular television program *Beyond 2000*, shown on Channel Seven and GWN at 8.30 pm on Tuesdays.

On October 13, the program covered CALM's successes with DNA

fingerprinting techniques, used to identify native birds illegally trapped in the wild and passed off as the offspring of captive birds.

On November 10, *Beyond 2000* showed CALM's forest inventory operation, believed to be

the biggest forest stocktake carried out in Australia, and which had already attracted national media attention.

Unfortunately, we were unable to inform CALM NEWS readers in advance as program dates were unavailable to us in time.



Wildlife officer Bouydan Yarran goes over finer points of plant identification with students who attended the careers seminar. Story and photo by Verna Costello

Aboriginal students visit CALM

CHILDHOOD lessons in the Nyoongar culture, a colour slide show on bush foods and medicines and the activities of the Wagyl were a few of the topics that received an enthusiastic response from 45 Aboriginal students and their five supervisors recently.

The students in years 10, 11 and 12 were from the Cannington-Armadale area and were attending a two-hour session organised by CALM wildlife officer Trevor Walley at the Como Training Centre.

Trevor also spoke on his training and experiences as a district wildlife officer, and one of about 20 Aboriginal people employed by CALM across a broad range of occupations

such as research scientist, technical officer, liaison officer, rangers, wildlife officers and clerical.

The session was part of a week-long, residential Careers-1992 Seminar at the Ministry of Sport and Recreation's Point Walter Conference Centre in Bicton where the students were shown a wide range of education, employment and training opportunities available to them.

An important aim of the seminar was to develop a sense of identity and community between the students and Aboriginal people who organised, supervised and took part in it, and to meet and hear the experiences of Aboriginal role models out in the wider community.

The students also participated in self-esteem workshops, visited other government departments and took part in social and cultural activities.

Feedback from students on the session at Como was positive, typical comments being:

"It was great."

"It should've been longer to include time out in the bush."

"Can't wait 'til next year."

The seminar was an initiative of the Department of Employment, Education and Training, Youth Access Centre in Armadale, liaising with the Centre for Aboriginal Programs at the University of WA to coordinate the seminar on its behalf.



With frozen smiles and frigid fingers, three CALM mariners, left to right, Alan Byrne, Nigel Sercombe and David Pearson practice the HELP survival method while instructor Andrew Borral, in wetsuit, looks on. Photo by Andrew Hill

Eleven get HELP in rough waters

ELEVEN CALM staff have successfully completed a four-day Course in Proficiency in Small Craft Safety and Handling.

The Maritime Studies Department of TAFE conducted the course at the coastal waters district office at Hillarys, with certificates being issued to the successful participants by the Department of Marine and Harbours.

The first three days of the course consisted of theory covering topics such as the skipper's responsibilities, boat construction, fire prevention, regulations on prevention of collision, chart pilotage and buoyage.

Practical sessions covered rope splicing and

knots and a swim, fully-clothed, in the Hillarys Marina.

The purpose of this last exercise was to show how participants could increase their time in cold water conditions for a 30 per cent longer period without suffering from exposure.

The exercise, carried out by CALM's intrepid eleven in icy conditions, is known as Heat Escape Lessening Practice (HELP).

The final day was also devoted to practical exercises, operating patrol vessels *Pseudorca* and *Wadjuk* in what turned out to be highly unfavourable boating conditions with 25-knot winds and rising seas.

Nevertheless, all successfully completed the tasks.

Course participant Alan Byrne said he believed the course was a must for those officers who operated CALM's small craft in local and immediate off-shore waters.

"Much of what we learnt could mean the difference between life and death, particularly in emergency situations," Alan said.

The successful mariners were: Bill Muir, Matt Warnock, Mark Bailey, Phil Roberts, Peter Collins, Phillip Fuller, David Pearson, Stephanie Turner, Nigel Sercombe, Andrew Hill and Alan Byrne.

New Manager at Geraldton

IN THE wake of Geoff Mercer's departure for Queensland, where he was appointed a regional director with the Queensland National Parks and Wildlife Service, Greg Leaman has been appointed manager of CALM's Midwest Region.

Greg was previously district manager at Katanning in CALM's Wheatbelt Region.

He is well equipped for his new job, having been a park ranger, wildlife of-

ficer and a district manager in Tasmania before coming to WA.

Greg has wide experience as a bushwalker and scuba diver and is regarded as one of Australia's experts on the construction and maintenance of bushwalking trails.

During his period at Katanning he completed a degree in Applied Science (Parks and Recreation) by external study with the Charles Sturt University in New South Wales.

"The new job is a big challenge but that's what I enjoy - a challenge," Greg said.

"I am also impressed with my regional and park staff who are very experienced and enthusiastic."

Greg's priorities include the development of a strategic plan for the Midwest Region and the cementing of CALM's local community relations through effective communications and a highly professional performance.

Learning the lingo

ONE of the biggest problems facing people who write about the Nyoongar Aborigines and their culture is the fact that the Nyoongar language - like many aboriginal languages - is an oral one.

This makes it difficult for writers trying to describe things using the Nyoongar names. Wordlists produced during the past 150 years have differed in the anglicised spelling of the spoken Nyoongar word, and this has led to disagreements in what is the correct spelling.

But Peter Bindon,

co-author of a new book on the Nyoongar language recently published by the WA Museum, says "there is no correct spelling, only a more preferred spelling".

A *Nyoongar Wordlist from the South-west of Western Australia* is divided into two alphabetical sections: Nyoongar, English and English Nyoongar, and contains approximately 12 000 Nyoongar words, providing the most comprehensive wordlist to date.

Each word is referenced to its source list, and to produce this new

compilation, 25 wordlists in a period from the 1830s to the 1980s were consulted.

This book will be an invaluable resource for schools, teachers, students, CALM field staff and all those interested in the Nyoongar culture.

The Spring 1992 issue of *LANDSCOPE* carried an article by Peter Bindon, and district wildlife officer Trevor Walley, (himself a Nyoongar) entitled *Hunters and Gatherers which looks at a typical year in the life of the Nyoongar people who inhabited the lands around the Swan River.*

Not another seminar?

by Karen Shaddock

"OH NO," I thought, "Not another seminar, I already know a lot about the Perth metropolitan area, do I really have to go?"

"Look at the piles of work around my desk," I moaned to anyone who'd listen.

Pray for sun

The fax, hastily sent to us the previous afternoon, had asked us to bring wet weather gear, walking shoes, umbrella, warm clothes and to pray for sun.

"Great! Just what I need, a seminar I don't want to attend and rain as well."

As you can see, lots of negative thoughts but there I was driving up to Mundaring, to The Hills Forest to attend the Perth Outdoors Information Seminar and Field Day held by Swan Region on a crisp, sunny, spring morning. (No rain so far.)

Eye contact?

We were met and ushered into a quaint field-study centre with an 'interesting' L-shaped room (interesting, that is, for the poor presenters trying to make eye contact with the audience.)

The seminar was opened by Alan Walker who told us of the importance of 'front line

staff' being fully informed of the objectives of the soon-to-be-launched Perth Outdoors Strategy.

Peter Sharp then gave us a basic outline of the strategy and key components of Perth Outdoors from his perspective as the author.

The customers

He was followed by Gil Field who gave a most amusing and entertaining version of who the customers would be, what they would want, and the lengths to which they will go to achieve their aims. (Ask Gil, when you have time, to tell one of his tales as a ranger in Queensland's national parks.)

Then there were delicious hot muffins and tea in the brisk, mid-morning air followed, on our return to the field-study centre, by an audio-visual extravaganza - a slide show of the varied landscapes covered by Perth Outdoors, from seascapes to the Ranges and all in between, set to inspiring music and presented by Rod Annear and Andrew Tatnell.

Of all the items presented on the day this must be the one that

captured most people's attention and imagination - and, hey, don't we have some wonderfully scenic places - and so close to Perth.

Alan Walker then gave us the focus for 1992-93 and where Perth Outdoors was going.

A picnic lunch at Fred Jacoby Park in the bracing, spring sunshine was rounded off by a guided walk, through an area of bushland showing various venues used during the Go Bush Program, and led by Barry Hooper.

I must admit that due to a really sore knee, I sneaked back on my own on a slightly less gravelly and treacherous path.

Once back indoors, Barry gave us a quick low-down on the various activities offered by the current Go Bush Program. (I must remember to book in some of my family next time).

Customer-focus

Alan Brien, the Manager of Whiteman Park, was the next presenter with a motivating talk on meeting our customers' needs and developing a customer-focus.

It was interesting to hear another view from such a dynamic speaker and I'm sure we all came away with lots of

'positives'.

Finally, but not least, David Gough whetted our appetites for the new Perth Outdoors book, informing us how the book came about and the enormous task faced by those involved to collate the information available about open spaces around Perth. Not only areas of CALM land are covered but also those vested in local government authorities, other government departments, etcetera, that fall within the Perth metro area.

Thank-you

I would like to thank those involved in making this day happen, the presenters for their time, all those behind the scenes in Swan Region who had input and special thanks to Paula Wood, Barry Hooper and Stev Slavin for the ground work at Hills Forest.

Positive outcomes

It just goes to show that even from negatives something positive and reinforcing can happen, and even better, perhaps, the power of positive thinking works - (remember, we were asked to pray for sun) - we had only one minor shower the whole day and that was when we were indoors.



Alan Walker (left) explains Hills Forest map to participants in the second Perth Outdoors Seminar held at Hills Forest Study Centre. Photo by David Gough

Map award to Land Information

By James Smith

STAFF in the Land Information Branch are feeling justifiably proud of a recent award jointly earned by CALM and the Department of Land Administration (DOLA).

The award was made by the Australian Map Industries Association (AMIA) in Adelaide where the Pilbara Tourist Map was judged 'the best commercial map product'.

The map is one of the StreetSmart series and was produced by DOLA with input from CALM's Land Information Branch.

The map's coverage begins just south of Carnarvon, on the North West Coastal Highway, and takes in the northern coastline to Broome, stretching inland to the communities

of Tom Price, Wittenoom, Paraburdoo and Marble Bar, and as far east as the remote mining settlement of Telfer.

The Pilbara map highlights the many physical and cultural attractions of the region, including the location of many well-known homesteads.

As well as detailing the communities of major town centres, it features useful information on CALM-managed lands and waters including Karijini, Millstream-Chichester and Cape Range National Parks and Ningaloo Marine Park.

Individual enlargements of each of these parks provide visitors with

details of pictures, picnic and camping locations, walk trails and road conditions, as well as reminders of potential dangers from the natural environment.

The Pilbara map highlights existing and proposed conservation areas.

The inclusion of this information is vital in educating and assisting visitors on their journey north.

This new map represents a vital link in the StreetSmart series, overlapping with the Gascoyne Coast, West Kimberley and East Kimberley touring maps.

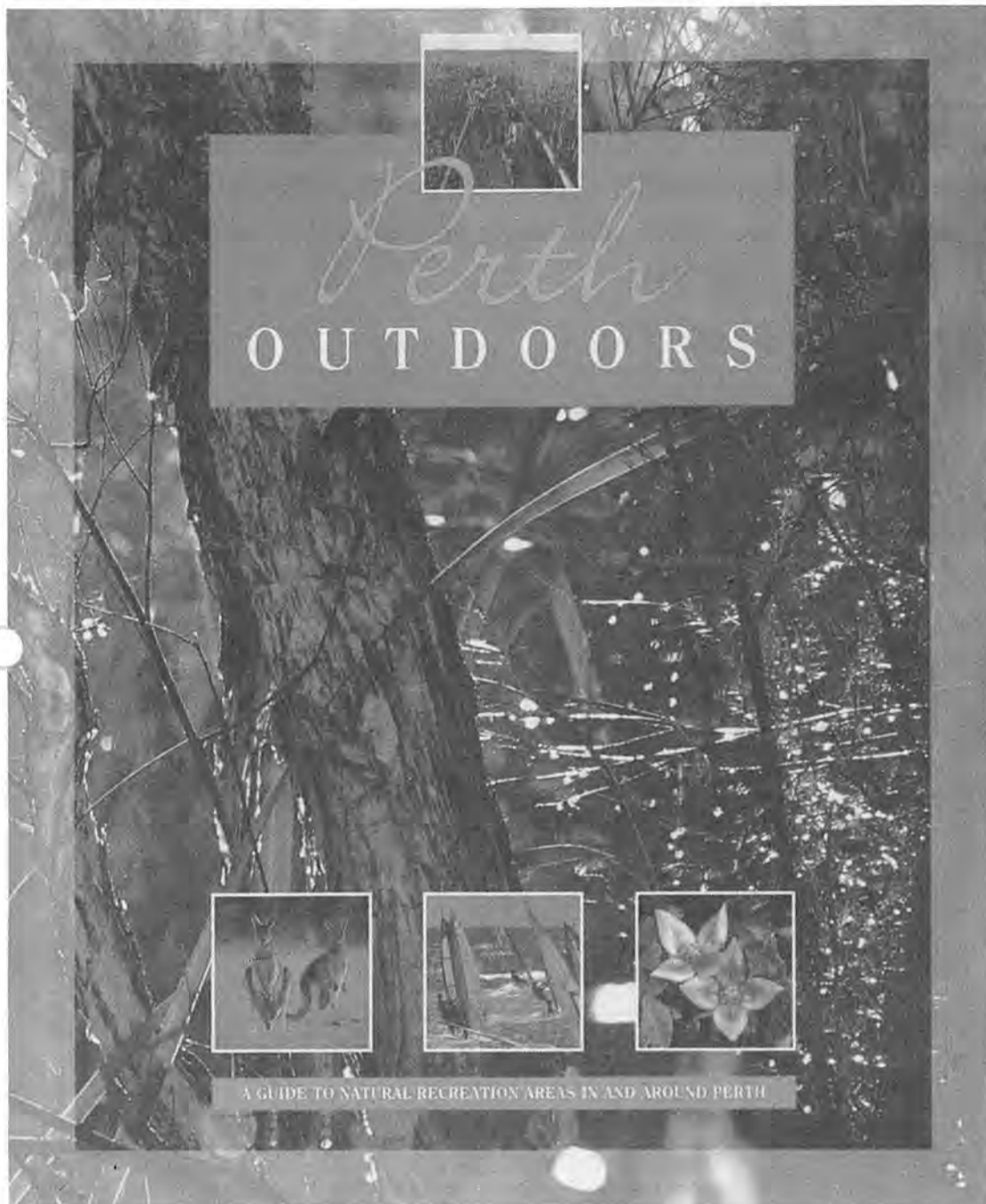
DOLA Central Map Agency retails the map for \$5.95, but CALM staff may buy it direct from Como and Pilbara offices.



CALM Ball

The Calm Annual Ball has been cancelled due to insufficient numbers.

Social Club members will receive circulars informing them of alternative arrangements.



Front cover of the book - Perth Outdoors.

Perth Outdoors - a book for all seasons

PERTH OUTDOORS - the latest and most exciting CALM publication, due to be released in early November - is the culmination of a year's work researching and writing about the natural recreation spots in and around Perth.

For the first time, CALM has produced a publication that deals with areas outside CALM-managed lands.

Brainstorm session

The decision to venture beyond the boundaries of the CALM estate came as a result of a brain-storming session held at Crawley last year.

Originally, *Perth Outdoors* was to be an updated version of *Beating About the Bush*, but the decision to extend the parameters of the book put the whole job in a different light.

More than 500 individual recreation spots in the natural environment in and around Perth were visited, and from those, just less than 300 were selected for inclusion in the book.

Each spot had to meet some basic criteria to be considered for inclusion.

For families

They had to be suitable for a family, have basic picnicking facilities, and have some environmental or conservation value.

Having said that, there are a few places included solely on the strength of

the natural value, but the lack of basic facilities is clearly stated.

Potentially, *Perth Outdoors* has a market of more than 2,000,000 people (population of metropolitan Perth plus tourists).

Being centred on the area of greatest population density, it is likely to have a higher readership and usage than any other CALM book to date.

Many of those readers will be new to this type of 'nature guide book' (or to use the latest jargon, 'ecopublication'), and may be taking their first steps towards an appreciation of the natural environment.

Because of this, *Perth Outdoors* had to be structured in such a way as to make that step as easy as possible.

It is designed to encourage and stimulate readers to find out something about places they might like to visit and, having got them there, to open their eyes to what is around them.

Three sections

The book is divided into three main sections.

The first section - Major Parks and Places in Perth Outdoors - looks in depth at the area's national parks, marine parks, regional parks, nature reserves, and other special places like Kings Park and Rottnest Island.

Descriptions are given of the landscapes, history and typical plants and animals of each of these

places, together with details of other places of note within the specific parks or reserves.

The second section - Perth Outdoors, region by region - divided the Perth Outdoors into six geographic areas that also follow natural boundaries within the region. These are North (of the Swan River), South, Darling Range, Swan and Canning River Foreshores, Swan Valley, and Avon Valley and Catchments.

Detailed information

The recreation spots within each of these clearly defined areas are described in varying degrees of detail and information is given about the distances from Perth (GPO), travelling times, what to do, the facilities available, and best times to visit, as well as information about walks and other nearby attractions.

The final section - What to do in Perth Outdoors - highlights some of the activities and other pursuits available in the area.

These include bushwalking, camping, canoeing, cycling, picnicking, whale watching, wildlife photography and yachting and river recreation.

Also listed are heritage trails and a number of suggested scenic and wildflower drives.

Perth Outdoors is also packed with additional reading in the form of self

contained features on the plants, animals, geology and other natural features of the area.

There is a plant reference list of those plants noted in the book and a plant calendar that tells readers where and when to find some of the spectacular wildflowers in Perth's great outdoors.

Something for everyone

There is something for everyone in *Perth Outdoors*. It is truly a book for all seasons providing a wide range of choices for those wanting to know a little bit more about Perth's natural environment.

Perth Outdoors is aimed at every family living in and around Perth. It is the ultimate guide to getting out and enjoying nature, and if you buy only one book about Perth, it has to be this one.

Retailing at only \$19.95, *Perth Outdoors* is excellent value as a friendly recreation guide.

It will be available from CALM offices, bookstores and tourism agencies throughout the Perth metropolitan area.

The book was researched and written by communications officer David Gough with assistance from public affairs officer John Hunter.

"It was a mammoth undertaking that also involved physically checking many of the locations," David said.

Launch of Perth Outdoors Program

by John Hunter

IT WAS spring! The sun, the birds, the wildflowers and cool green forest were just right for a celebration. And so the former Environment Minister, Bob Pearce decided to announce the \$1 million dollar Perth Outdoors Program at Fred Jacoby Park Mundaring.

Ian Gale from Mundaring office feverishly arranged logistics and equipment to cater for some 200 people, Caris Bailey of Corporate Relations alerted the media and Seamus Mulholland from Policy Directorate planned and organised invitations for the launch of the program.

Everything was on track. The park was beautiful and the organisation - spot on.

Then, on the day of the launch, it happened.

To test the diligence and

the fortitude of CALM staff, invited guests and the public, the skies opened up, and the rain came down in buckets.

Corporate Relations staff in their city suits and lounge shoes, arrived on site and hastily set up road signs and prepared for the Minister and the Executive Director.

Mundaring District staff, adequately protected from the drenching rain, in boots, oilskins and hats, efficiently continued their task of setting-up. By now, the Corporate Relations staff resembled a couple of drowned chuditches.

However with Syd Shea's optimism and Bob Pearce's determination that the show should continue, an entertaining morning was enjoyed by all.

The public enjoyed their guided bush walk, Alan Walker, Syd Shea and Bob Pearce addressed the assembly and all in attendance were fascinated with Wildlife Officer Trevor Walley's talk on Nyoongar ways and aboriginal bush tucker.

Then as the hot johnny cakes and billy tea were offered, the rain subsided, the bush band commenced playing and the champion axemen team, the Dingles, put on an awesome display of log chopping.

The announcement and launch of the Perth Outdoors Program which will encourage city residents to make better use of local recreation sites was a success. It showed on that day that, even in adverse weather, people can really enjoy themselves in our fantastic parks and forests.



From left, Chas Casotti and Barry Rhodes cook up a batch of hot johnny cakes and billy tea, which are eagerly sampled by Alan Sands and Jenny Alford.

Photo by John Hunter

Successful Spring Outdoors Program

WELL over 200 people attended CALM's Spring Outdoors Program held each weekend during October and early November.

The program offered a wide range of fun and informative activities to encourage people to discover some of Perth's great natural wonders.

Participants learnt about waterbirds, wetlands and wildflowers, walked part of the Bibbulmun track, went on star-

light adventures, found out about whales and dolphins and learnt about life under the waves.

CALM activity coordinator Andrew Tatnell said that Perth had so many areas, some in the heart of the city, which were great places to observe and get to know local plants and animals.

"We hope that by offering people the chance to visit some of these places with an expert guide they got to know Perth better

and found out about the natural wonders on their doorstep - we also wanted people to have fun," Andrew said.

"One of the activities gave them the chance to find out from marine veterinarian Nick Gales, about the release of the 'Atlantis' dolphins and to learn about humpback whales.

The activities were led by experts from CALM, the WA Museum, Perth Zoo and volunteers.

Field officer training 1917 - 1991

AFTER 74 years, the Cadet Field Officer Training Scheme officially closed its doors in December, 1991. The Scheme survived the Great Depression, World War II, and the devastating fires of 1961, successfully producing 350 graduates.

Alan Byrne looks at the history of the Scheme:

Forest field officer training began on March 17, 1917 with the appointment of Dick Perry and Bill Ross as four-year forest apprentices. They were joined by another four apprentices later that year, one of whom, J. H. Brown, resigned after only two months' training.

The appointments were made by the Department of Woods and Forests which became the Forest Department in 1919.

In 1921, the remaining five apprentices attended a six-month intensive training program at the Ludlow Forest Apprentice School under the tuition of Dr Stoaite, who later became conservator of forests.

Six-day weeks

Before the six months' theoretical training, the apprentices had to work six days per week for the Department in various south-west districts.

The days were long and intense, with the apprentices learning nursery work, plantation establishment and hardwood silviculture, as well as maintenance of such implements as the broadaxe, crosscut saw and the adze.

Horsemanship was a strong component of a forester's duties. A good forester was often measured by his ability to handle and care for his trusty steed.

The evenings were spent 'burning the candle' to complete assignments and reports for the correspondence studies each apprentice was obliged to undertake.

The first graduates from the original apprentices' scheme were Dick Perry, Bill Ross, Claude Kinsella, Jack Thomson and George Glover.

This system of training

continued until 1931, after which forest officers were recruited from the forest workforce and timber industry.

Forest trainees

The next official intake of forest trainees, as they became known, began in February, 1952 with 10 trainees working in forest districts throughout the south-west.

In December 1953, the trainees attended a three-week course at Ludlow under the tuition of Wally Eastman.

Jim Raper, Gordon Styles, Brian Baker and Frank Quicke, were among the last group of graduates from the Ludlow Training School.

Gordon Styles commanded great respect among his colleagues for his knowledge and skills in fire management. He retired in December 1991, after 39 years of service, vacating the position of regional forester, fire control.

In February 1955, 20 forest trainees began their two-year course with postings to forest districts throughout the south west.

Each trainee would spend about two months in one district, before being transferred to another.

Their work included clerical, workshop and crew member duties.

Guidance officers

A guidance officer in each district programmed the trainees' work and nurtured their progress.

After 15 months in the field the trainees spent six months at Dwellingup Training School.

The training school consisted of two Nissen huts

and a kitchen/dining room all of which were destroyed in the 1961 fires.

Training Officers Frank Podger and Joe Usher supervised six months of intensive theoretical and practical tuition.

The graduates from the inaugural Dwellingup scheme, appointed as forest guards in January 1957, included Eric Jenkins, Max Rutherford, Frank Vince and Les Robson.

Upon graduation, Eric Jenkins began a Bachelor of Science (Forestry) degree then a Diploma of Forestry.

He retired from his position of regional manager, Swan Region in August, 1992 after 35 years' service.

1961 fires

The existing training centre was built in Dwellingup in 1959 and was used as the district headquarters after the 1961 fires which destroyed the district office.

In 1964-65, the first full-time training officer was appointed. This was Roger Underwood, now General Manager of CALM.

In 1967, the trainees became known as forest cadets and were appointed under a cadetship program.

They were located at the Dwellingup Training Centre for two years, broken by six to eight weeks' practical training in the first and second years.

In 1969, the Forest Department appointed first year forest cadets to Mount Lawley Technical College to complete a one-year Certificate in Forestry Fieldwork.

The second year was spent at the Dwellingup Training Centre, with time spent in various forest districts.



The last of a long line of graduates - December 1991: back row, left to right, Iain Alexander, Andrew Milne, Nigel Sercombe (forester), Mark Lush, Alan Byrne (training officer), Bruno Rikli and John Edwards. Front row, left to right, Ian Gale, Joy Borison, Aminja Koch, Jeremy Spencer, Warwick Roe, David Atkins, Stephen White, John Fishwick and Matthew Jones. Delayed action photo by Warwick Roe

This continued until 1979 when first year studies were transferred to Bunbury Technical College so the cadets could undertake practical work in CALM's Central Forest Region each Monday.

First woman cadet

In 1982, the first female cadet, Kylie Kau, was appointed.

Kylie completed the two-year course with distinction and received the Keynes Award for outstanding performance in both theory and practical field work.

With CALM's formation in 1985, the course curriculum was reviewed and a new syllabus developed.

Three streams

This syllabus was designed to meet the needs of three occupational streams: forest officer, wildlife officer and national park rangers, as these groups now constituted CALM's field officers.

Syllabi were prepared and implemented for subjects such as law enforcement, recreational management, environmental education, terrestrial and marine park management, while retaining traditional units such as silviculture, fire management and environmental protection.

Tradition broken

The tradition of appointing graduates as forest officers was broken in 1988 when Bill Evans was appointed as a national

park ranger while Lyle Gilbert and Andrew Horan became wildlife officers.

Emphasis on skills

The emphasis on skills-based training and education provided the foundation on which successful careers are based.

Over the years graduates have progressed into senior positions within both the Forest Department and CALM.

Training officers such as Ross Gobby, Geoff Airey, Roger Underwood, Frank Pridham and Alan Scott, to name but a few, will long be remembered and respected by their

protegees.

The role of training officer involved much more than training and education - it was a role that developed and fostered a work ethic, a work culture and team camaraderie that was unique and difficult to quantify.

New training system

The new system of training has been developed to take advantage of qualifications provided by Technical and Further Education and other tertiary institutions.

This enables CALM to capitalise on the educational experience and

resources of these institutions which are directed towards courses in natural resource management.

The practical component

The practical component will be catered for via practicums (while studying), vocational employment and, on appointment, in-service training.

Each change in training over the years has been timely and successful.

While the cadet program has served CALM well and provided a Departmental tradition, I am sure that this latest change, the most dramatic of all, will be equally successful.



The five original apprentices at the Ludlow Forestry School, were (left to right), D.H. Perry, W.A. Ross, C.V. Kinsella, J.A. Thomson and H.G. Clover. Photo courtesy Forest Focus



THREE of the first graduates from the apprentices appointed by the Department of Woods and Forests in 1917 are still going strong and turn 90 this year.

Dick Perry, Bill Ross and Jack Thomson spent their entire working lives with the Forests Department.

Dick Perry, a forester

with 50 years service specialised in the Forest Department's early tree-breeding program.

He was required to spend two years in the forest of Leira, Portugal, collecting seed and scions from 'plus phenotype' maritime pine specimens.

This material formed the basis of an intensive maritime pine breeding program throughout the

south-west of Western Australia, a major legacy of the program being the highly productive Gnarup and Yanhep pine plantations.

Dick (right) and Jack Thomson were pictured at Jack's 90th birthday party in August. Dick turned 90 in July and Bill's birthday is coming up. All three have remained good friends over the years.

Kalbarri Open Day

IT IS 8.00 am and about 100 people in 30 four-wheel-drive vehicles are milling about the Kalbarri National Park office gates.

The occasion? Kalbarri National Park Open Day.

A warm welcome from ranger-in-charge Roy Harris is followed by a demonstration of CALM's firefighting equipment before setting off on a tour of the park.

On Meanarra Hill, fire behaviour is discussed and the assembly views the aftermath of the December 1990 wildfire, while enjoying a breathtaking panorama of the town and ocean, thanks to some truly superb weather.

Hub caps engaged

From there the convoy heads for the bush and hubs are engaged for the first time that day, but not the last as some were yet to discover!

Considering the circumstances - hungry sand and a few less than seasoned bush drivers - good progress is maintained and the next stop is near the Betty Crossing track to enjoy another spectacular view and see the regrowth of areas burned in 1987.

The Loop and Z Bend is next on the agenda.

In the last two years, rangers and maintenance workers have constructed walk trails and plinths in both locations, substantially improving public access and enjoyment.

by Gerry Deegan

Unfortunately, not all participants are having as good a time as others.

IC for sore heads

Those who had enjoyed the previous night's fishing club dinner are establishing their own intensive care unit in the Z Bend car park.

Our intrepid travellers now head south and follow the route of the old telegraph line to Junga, stopping along the way to receive a brief talk about the line and the recent fire in that area.

Broken insulators still mark the telegraph route and at times like the present, when fire has cleared the vegetation sufficiently, it is still possible to pick out wheel ruts of the old service track and stock route.

The vehicles wheel about in the old yard at Junga in much the same fashion as the wagon trains of the old wild west.

Southward push

After lunching here, the southward push continues and thanks to little fingers on a few free-wheeling hubs, push becomes an appropriate description of the convoy's progress!

Drivers affected by this turn of events keep their cool rather well, which some say is poor form as it detracts from the entertainment.

Following an inspection of a mallee fowl nest mound, the travellers move on to the abandoned rabbit-proof fence, which marks the southern boundary of the Kalbarri National Park, and stop to inspect the old hut which was formerly used by the workers who maintained the fence.

Feral animal control

Continuing around the south-eastern flank of the park, the rangers describe their burning experiments and research in that area then Tony Farrell, the Agricultural Protection Board officer from Northampton, gives a brief talk about feral animal control.

This is the final episode of the Open Day and there appears to be a smile on every face and talk of doing the same again, perhaps taking in a different part of the park.

Improved finances

The success of the day is measured not only in the obvious enjoyment of participants, but also in a slight improvement in the financial status of the Kalbarri Volunteer Bush Fire Brigade which jointly hosted the outing with CALM's National Park rangers.

A donation of \$10 per vehicle is quickly and cheerfully handed over for new equipment.

"Well worth every cent," one of the drivers is heard to say.



Kevin Kenneally (left) and Reg Tubby, MLA admire students' handiwork at Gould League Camp School. Photo by John Hunter

Gould League - the CALM connection

by John Hunter

THE recent 42nd WA Gould League camp-school graduation at Bickley saw more than 40 children complete a successful two weeks of biological and environmental studies.

At the presentation of certificates and special prizes, Gould League President and CALM botanist Kevin Kenneally paid tribute to the high standard of the students' work.

Kevin also reflected that, like some Gould

League members of the past who were now respected scientists, environmentalists and CALM volunteers, present day graduates may well go on to a similar future.

The students came from primary schools throughout the State and were involved in extensive field studies on selected natural history subjects within the Bickley Valley on the Darling Scarp east of Perth.

A typical day saw students jogging before

breakfast, followed by studies along bush trails then classroom meetings, where they carried out fieldbook write-ups and reported their observations to other group members.

After lunch, there was an in depth study of the environment and weather-reporting, followed by activities such as plastercasting and plant pressing, as well as

listening to visiting speakers. Evenings usually comprised natural history films and social events.

Camp mistress Alma de Rebeira announced that Ruth Willis of Hollywood Primary School was the recipient of the Hamilton Award for her observations on fungi made during the camp.

She also praised the rest of the students whose behaviour and dedication to study she said was nothing less than excellent.



Participants in Kalbarri Open Day. Photo by Gerry Deegan

What's new on the shelves

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

Leaflets:

- ◆ Ningaloo Marine Park Fishing Guide
- ◆ Have you seen a Swamp Tortoise?

Leaflets reprinted:

- ◆ The Stirling Range National Park Heritage Trail
- ◆ Arbor Day; Day of Trees
- ◆ Yanchep National Park
- ◆ Walyunga
- ◆ Esperance
- ◆ Karijini
- ◆ Millstream - Chichester National Park

- ◆ Nambung National Park
- ◆ Have you seen this insect?

Booklets

- ◆ Leeuwin-Naturaliste National Park; Cave permit system
- ◆ Shark Bay (reprint)
- ◆ Landscape Magazine; Vol 7 No 4
- ◆ Tree Killer (reprint)
- ◆ Forests for the Future (reprint)
- ◆ Gngangara Forest
- ◆ Geology of the Gorges (reprint)
- ◆ Protecting Wildlife in Western Australia

Management Plans

- ◆ Goldfields Region; July 1992
- ◆ West Cape Howe National Park Draft; 1992
- ◆ Shoalwater Islands Management Plan 1992-2002; Management Plan No 21 and Analysis of Public Submissions
- ◆ John Forrest National Park Draft; September 1992

Other

- ◆ Arbor Day Poster
- ◆ Kimberley Parks Newspaper (reprint)
- ◆ Calm Briefing Paper 2/91 - Domestic Fire-

wood, Craftwood and Other Minor Forest Products in the South West;

Answers to Common Questions

- ◆ Seed Price List 1992-93
- ◆ Nuytsia; Western Australian Herbarium - Vol 8 No 2
- ◆ Reprint - Dieback Disease; Hygiene Manual

Reports

- ◆ Records of outbreaks of defoliating insects in jarrah forest, south-west Western Australia, from 1960-1990; Technical Report No 28
- ◆ Annual Waterfowl Counts in South-West Western Australia 1989/90; Technical Report No 29

Occasional Paper

- ◆ Research on the Impact of Forest Management of South-West Western Australia, Occasional Paper No 2-92

Research Bulletin

- ◆ Purnululu (Bungle Bungle) National Park; A Survey of the Wildlife and Vegetation - Research Bulletin No 6

We ought to be in pictures - and we are

SPRING is moving rapidly into summer and with it has come the usual rush of shutterbugs and movie makers.

From Kalbarri to Albany these seasonal visitors arrive in plague proportions armed with camera equipment from the super-sophisticated resembling something from the set of 'Alien' to the simple 'point and fire' like my mum's plastic throw-away.

Meanwhile, rangers and district managers nervously await the dreaded faxes from a very far away Corporate Relations Division Officer.

by John Hunter

Intricate requests to film on CALM land are one of a number of special tasks which are processed by Corporate Relations Division. It is necessary to pre-determine and arrange subjects, localities, departmental contacts in the field and if special licences and fees are needed.

Requests to film commercials, dramas or specially supervised scientific subjects usually attract a fee. In the past such fees have resulted in certain research and national park

programs receiving a much-needed financial boost.

Tourism, education and news documentary teams together with professional still photographers, are allowed to film freely on CALM lands, but for safety and land use records, must have the usual pre-visit written permission.

Past interesting topics have included, a Japanese Dick Tracy drama on Matilda Bay Reserve, the film *A Fortunate Life* in John Forrest and Yanchep National Parks and a Japanese documentary on green turtles off the Dampier

Archipelago.

Lighter moments and subjects included a romp among the pinnacles in Nambung National Park by models from Japanese Playboy Magazine and a similar request by Elle MacPherson's representatives. Offers of assistance along with bizarre suggestions came thick and fast.

Tina Dalton and the crew from the TV holiday show *Getaway*, will produce a segment on Marmion Marine Park and sea lions at Carnac Island. Also, Tony Bomford, a prominent British film maker, will accompany CALM'S Dr Gordon Friend

to film unusual wildflower pollinators in the Stirling Range National Park.

Another film crew headed by Mike Newton from South Australia will begin a year-long circumnavigation of Australia on a seven-metre open catamaran. Mike and his film crew will call into and take film footage of national parks and reserves along the coast of WA. The film, *Around the Edge*, will be sold to television and magazines to raise funds for the Australian Cranio-maxillo-Facial Foundation and to make an adventure/education series for schools.



A highlight of the Swan Region strategic planning meeting was the 'discovery' by regional manager Alan Walker (right) of a new species - 'Annear's woody pear' - held here by Rod Annear. In fact, it was just a twig stuck into an old piece of fruit. Rumour has it that Alan is already plotting his revenge. Photo by Andrew Tatnell

Sharing a vision for Swan

MAKING the most of conservation, commercial and educational opportunities in the Swan Region was the focus of two intensive workshops held over the last few weeks to develop a strategic plan for the Region.

The workshops were attended by 20 staff, including district managers and regional program leaders.

Regional manager Alan Walker said that more than 75 per cent of the population of WA lived in the Swan Region which had a wide variety of habitats from forests,

by Andrew
Tatnell

wetlands and woodlands to the popular coastal and marine environments.

"Agreeing on common goals for issues raised during the workshops has been both challenging and rewarding," Alan said.

"The process itself was also valuable as it led to more understanding of the issues and opportunities facing work areas across the region.

"A shared vision and shared direction had emerged from the work-

shops, but the process did not end there.

"In a region as diverse and complex as the Swan, the needs of management and the shifts in expectations of the community mean that the plan will continue to be a framework within which work programs are developed."

On a lighter note ...

Amid the intense workshop sessions emerged some occasional bursts of humour, for example:

From Rod Annear - a suggestion to integrate

feral rabbit control with fitness programs was dubbed 'hare-obics.'

From Rob Towers - 'The Bubblemun Track as the name for the next underwater dive trail.

From Rod Annear - the marine version of *The West Australian's* Constable Care, Coxswain Cockle saying, 'Only a no-hoper would spear a proper.'

A suggestion of a network of bridle trails for State forest areas was greeted with the question "Was that bridle or bridal?" Paul Brown's reply was "For you Alan (Hordacre), what's the difference?"

Bernier Island - the ultimate field trip

MENTION the words 'field trip' to most people and it conjures up an image of sunny days spent looking at pretty flowers and cute animals, and balmy nights spent around a camp fire.

Most CALM researchers know that variations on this theme exist, but we have been on the ultimate field trip.

Picture the scene - you are asked to endure a field trip to Bernier Island. The Bernier Island that sits in the sapphire blue Indian Ocean 50 km off the coast of Carnarvon.

This is the place where Peter Speldewinde and I will spend 20 days researching the Shark Bay mouse.

The reality

It has been pouring all night and there's a strong nor'easterly. Three and a half hours from Carnarvon and the mighty cliffs of Bernier Island appear. But there is a problem. The seas are so high and rough it is impossible to

get gear from Fisheries' boat to CALM boat, and even if we could, we would get swamped trying to land.

The bad weather likes Carnarvon so much it decides to hang around for another five days.

Biting in unison

Day six and the weather is fine, sunny and an ideal day to repeat the boat trip. We land safely on the world-famous Bernier Island. What are these quaint little flies that descend on us in swarms and bite in unison? Never mind, we'll set up camp and prepare to catch all the Shark Bay mice.

Day 14 and this is paradise. But why have we caught only six mice? Don't worry, maybe the females are pregnant and not moving around.

3.00 am on day 15: A nor'easterly blows up, the sea rises in sympathy and we are not to come off the Island for another five days. But why is Peter writhing around the tent in

by Graham Hall

agony? Could it be the chilli he cooked last night? If not, could it be that he is seriously ill?

4.00 am: He is seriously ill. Cool analytical research scientist keeps things in perspective, assesses situation for a few milliseconds and opts for organised panic. He presses Royal Flying Doctor Service emergency button and waits to hear soothing voice. Nothing happens and the silence is deafening.

Kidney stones

7.00 am: Are we the only people alive on the planet? No, the RFDS in Port Hedland comes through. Doctor tentatively diagnoses kidney stones and recommends we evacuate.

Just for fun, the wind is blowing harder and the sea has risen still further. It has also started to rain. (Research scientist makes mental note to attend

church more often.)

2.15 pm: Carrying painkillers for the patient, the Fisheries' boat charges towards the shore.

Peter who?

Rescuers casually ask research scientist how well he knows patient, because pain killers are suppositories. Scientist states firmly he hardly knows patient at all - certainly not *that* well.

4.30 pm: Patient and gear cleared from beach in two-metre waves, howling wind and driving rain.

8.15 pm: Arrive in Carnarvon to be met by ambulance and entourage of on-lookers. Warm glow is felt knowing we're entertainment for locals.

Day 17: Arrive back in Perth after successful trip.

Oh, happy me

Day 18: Former Director of Research informs happy research scientist he must return to Bernier Island to continue work on wonderful little mouse. Oh well, these things happen.

The mulga complex

MOST of us have heard of mulga (*Acacia aneura*), one of Australia's most widespread species of wattle.

It is an extremely variable species, particularly in its growth habit and in the shape of its phyllodes.

The phyllode (a modified leaf stalk that flattens out and functions as a leaf) is a characteristic of most wattles.

Complex group

This species, and its closest relatives which include hop mulga (*A. craspedocarpa*) and bowgada (*A. ramulosa*), form a complex group which is of great interest to botanists.

Some preliminary work is being done to help clarify the genetic races of this group by Dr Peter Brain, honorary lecturer in botany at the University of Natal, in South Africa, and Bruce Maslin, principal research scientist at the Western Australian Herbarium.

Peter visited Perth earlier this year and, with Bruce, examined populations and collected phyllodes from the bush around Kalgoorlie, Meekatharra and Mullewa.

by Suzanne
Curry

Using the electrophoresis laboratory in the Herbarium, Peter examined proteins from phyllode extracts on gel plates which allow genetic patterns between different plants to be seen.

Initial investigations showed that this method could prove useful in sorting out classification problems with complex groups such as the mulga group.

Much more work will be required, however, before any conclusions can be drawn.

A hobby

In his retirement, this work has become a hobby for Peter and already he has done similar studies on two non-Australian acacias - *Acacia karroo* from southern Africa and *A. caven* from central South America.

Here, leaf extracts proved most helpful in revealing variation patterns within the two widespread, adaptable species.

So why do this work on these particular species?

All are variable, widespread species of great economic importance and the more we know about them the more potential uses we can explore and find for them. Mulga has been, and continues to be, used in many ways.

Spears and shields

For example, mulga has been used, traditionally, by Aborigines for making spears and shields.

In rural areas, it is used for fencing and firewood.

It is also of great importance as a soil binder and a source of fodder stock - particularly in times of drought.

More recently, the mulga growing in some areas of WA has been found to be particularly fine-textured and hard, and may be polished to an extraordinarily high lustre.

This is proving of great interest in wood-turning and woodcraft circles.

It is hoped that further investigations, using the electrophoresis technique, will contribute to a better understanding of the economically important mulga group.



Dr Peter Brain (left) and Bruce Maslin at CALM's Herbarium. Photo by Kevin Kennally

Controlled burn Collie-style

BECAUSE we share a burn boundary with so many private properties and because we want to continue our good neighbour policy, Collie District staff are planning to do forest fuel reduction burning in cooperation with Bush Fire Brigades this spring.

General outline

The Bush Fires Board, in conjunction with CALM, arranges the various resources to enable the burns to take place.

The burn boundaries are divided into sectors under the control of CALM sector bosses and Brigade officers.

CALM crews and Brigade crews will then work side by side on the burn boundaries involving lighting the edge, patrolling and

mopping up.

This liaison will provide opportunities for greater understanding of each other's roles and structures.

Como staff

A number of Como staff volunteers have been trained to supplement CALM Districts at wildfires in periods of emergency (and subsequent shortfalls in fire crews).

To become qualified as fire fighters the men and women in the Como crews need to attend controlled burns. Collie District has invited the Como crews to help with the District's 1992 spring burning program in readiness for summer's high fire risk season.

According to the Protection Branch's senior

training officer Kevin White, who liaises with Como when staff firefighting volunteers are needed, they are worth their weight in gold.

"Feedback from other districts where they've carried out the required three-day practical work needed to qualify has been most encouraging," Kevin said.

Highest praise

"We've had nothing but the highest praise for their hard work and willingness to do whatever is required of them. There's no shortage of volunteers, either.

"We have 40 staff volunteers, 18 of whom have qualified. The other 22 have mastered the theoretical stuff and now they're keen to get stuck into the practical side."