

B DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT YAARBU SONEIOS TEEROR

JANUARY-FEBRUARY 1996



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Penguin centre a boost for tourism and conservation

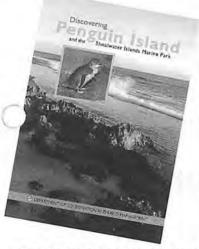
A NEW \$320 000 wildlife viewing centre opened on Penguin Island is set to become one of WA's major tourist attractions.

'The Penguin Experience' island disrovery centre, on the idyllic conservain park just offshore from Rockingham, is a co-operative project that has enormous input from the local community.

The building was partly funded by a \$132 000 grant to the City of Rockingham from the Federal Government's Regional Tourism Development Grants program and \$8000 from Kodak Australasia.

Environment Minister Peter Foss, who officially opened the centre, said Penguin Island was unique in being a major natural attraction within the metropolitan area of a big city.

"The new penguin discovery centre will be an important nature-based tourism opportunity for the State, attracting visitors from overseas and interstate," he said.



haviour and survival of penguins, giving them a fulfilling nature-based tourism experience not available anywhere else in Australia.

The new discovery centre has been designed to blend in with the surroundings and reflects the natural contours and colours of the island.

As well as the ferry fare, there will be a charge to visit the centre and see the penguins, to help offset the costs of operating the facility and assist with the development and management of the island and marine park.

A new Research and Management Centre is also being built on the island, with sponsorship from Western Mining Corporation, and when this is finished early in 1996, the two remaining asbestos cement buildings, remnants of past uses of the island, will be. The buildings will be removed and new boardwalks linking the new facilities to the jetty and picnic area will be built.

The areas occupied by these buildings will be rehabilitated, providing additional habitat for the wild penguin population.

New facilities, such as picnic areas and composting toilets, already built by CALM on the island at a cost of \$200 000, haave been designed to accommodate increasing numbers of visitors while protecting sensitive vegetation, wildlife and dunes from people pressure.



Environment Minister Peter Foss, (centre) takes a closer look at one of the penguins which now are part of a major new attraction in the new Penguin Island Discovery Centre. Keith Smith, left, from the WA Native Bird Hospital in Sawyers Valley and CALM's Swan Region marine operations manager Peter Dans look on.



Penguin Island is home to about 1200 little penguins, forming the largest breeding colony of these birds in Western Australia.

Visitors can see penguins that have become accustomed to interacting with people after they have been rescued and rehabilitated. The rescued birds, which would be unlikely to survive in the wild, are housed in an environment similar to their natural habitat

This allows the public to see and learn about the animals without the island's resident penguins being disturbed by visitors.

Visitors will also receive fascinating information about the biology, be-

The number of visitors to Penguin Island has already increased from 61 000 in 1991-92 to 81 000 in 1993-94, and are now set to increase even further.

CALM also launched a new book, Discovering Penguin Island and the Shoalwater Islands Marine Park.

This full-colour, pocket-sized publication is an excellent guide for visitors, and should inspire the general public and visitors to our State to take a greater interest in the island's natural environment and its inhabitants.

It is a practical field guide that will help visitors to learn about and discover Penguin Island's unique plants, animals and special features.

The book, which retails for only \$5.95, has been extensively checked by scientists and other experts, and beautifully designed by the creative award-winning team that produces LANDSCOPE magazine.

Volunteers who make a difference Hillary Merrifield, left, with Eggy Boggs. (See story on page 2.) Photo by Neil Mulligan courtesy The Bay Weekly

New year brings fiery answer-

CALMfire crews, wondering before Christmas where all the bushfires had gone, didn't have to wait long for an answer.

In the lead up to the end of the year, most CALM districts recorded a relatively quiet start to the fire season.

For example, Swan Region, which takes in the high fire risk areas in outer Perth such as The Hills Forest and Gnangara pines, in 1994 had more than 100 fires before Christmas Day. The comparable figure in 1995 was just 67, but by the end of January, 1996, this had more than doubled to 137.

CALMfire manager Rick Sneeuwjagt said that this season the three forest regions had attended 172 incidents by the end of January compared with more than 280 last year. Statewide, CALM crews have turned out to 225 fires up to the end of January, compared with a massive 356 in the same period the previous year.

The most intensive incident was in the Stirling Range National Park, where

lightning strikes started a fire in steep and inaccessible country around Toolbrunup Peak.

Crews from Albany, Walpole, Pemberton, Harvey and Katanning spent four days trying to contain the fire, which eventually burned through 10 500 hectares.

CALM incident controller Kelly Gillen praised the efforts of the volunteers, SES, Salvation Army and CALM staff who worked long hours in difficult Continued on page 2

FROM MY DESK =



By the time this CALM News is published we will have launched Bush Books. These are the first in a series of pocket-sized field guides designed to provide an easy way for people who are curious about our natural environment to identify Western Australian plants, animals and even landforms. Apart from meeting a community need-the first question people ask when they go bush is what is that?--these books will also be sought after by tourists because they are beautifully presented. I believe the books will be among the most important of the already significant list of publications CALM produces.

But the reason why I am writing about it in this column, however, is not so much to extol the virtues of bush books and urge you to sell them, but to use this project to illustrate how we can do new things and do things differently in CALM under the new financial arrangements that the Government has introduced for this department.

Any organisation has hidden assets which are often under-utilised or not utilised at all. CALM perhaps more than many organisations has a huge latent opportunity to capitalise on hidden assets within our organisation. Our most important asset is the knowledge that we have acquired from our training and experiences in conservation and land management.

Bush Books are a good example of how we can tap this huge latent asset. Bush Books have been made possible-apart from the fact that in Carolyn Thomson we have an incredibly talented, energetic writer, editor and organiser-because we have many people in CALM and related institutions like the Museum who have all the knowledge that is required to publish a regional guide to some aspect of Western Australia biota in their heads.

What we needed to unleash that potential was the provision of an incentive for people in CALM to help with the books. That in part was provided by the fact that the contributors were made authors and have their name on the books.

But we also needed the money to ensure that we could print and publish the books. Start-up funds were provided from the profits we make from our commercial operations, and now because we retain the revenue that we earn from the books, I am confident that this series of publications will become self-funding because we can roll over the money we make from the first books to publish new ones

If all goes well, and certainly initial reaction to the first seven published books has been incredibly positive, we should be able to produce dozens of regional identification guides to birds, animals, plants, landforms, fungi, (the stars!) ... whatever, in regions and sub-regions throughout the State. In fact, what we have in place now is a small business embedded in CALM which is responding to the demand from our customers, the community. Anybody in the department who believes that they have a market for a particular identification booklet in their region or district can put up a proposal for a publication. This procedure is now only possible because we have net appropriations. That is we keep all the money we earn.

Many times in this column I have foreshadowed that change now is continuous and I have acknowledged that it is painful, but I have also stressed that change also brings about huge opportunities to do things differently and better. So it seems logical to me that if we are going to put up with the pain of change we might just as well capitalise on the opportunities it presents. I urge everybody to take advantage of the fact that you can contribute and be part of the Bush Book series (I can't see why we can't produce 100 Bush Books as long as our customers continue to buy them), and also to look for ways to exploit the new opportunities created by the Government's freeing up of the public sector in Western Australia.

Observatory under CALM umbrella



Photographed in the Observatory's display room, are: (rear) Astronomical Assistants Greg Lowe and Tom Smith, Admin Assistant Carmel Borg, Clerical Officer Janet Bell, and Astronomer Ralph Martin. (Front) Technician John Pearse, Astronomer Andrew Williams, Government Astronomer and Director of Perth Observatory James Biggs, and Technical Manager Arie Verveer. Inset: Astronomer Peter Birch. Two part-time staff, not available when the photograph was taken, are gardener David Tiggerdine and cleaner Sheryl Smith, who make up the complement of 12 staff. Photo by Verna Costello

WHEN the Perth **Observatory became part** of CALM's Science and Information Division on January 26, staff were delighted, according to the Government Astronomer and Observatory Director Dr James **Biggs**—and here they certainly appear to be a happy crew.

"In fact, we've been telling ourselves that the 'A' in CALM now stands for Astronomy, and with a bit of luck, it just might catch on," said James. James said that Observatory staff were

familiar with CALM's community education projects, having occasionally joined forces with The Hills Forest staff

by Verna Costello

in its Go Bush! program "Armed with small,

easily transportable, but powerful telescopes, Observatory staff have taken community groups on night-time excursions, all of which were enthusiastically received by those taking part," James said.

"We've also enjoyed a mutually beneficial relationship with CALM's local fire-fighting staff, who do their best to restrict their prescribed burning to times when observation conditions are likely to be at their worst.

"Even better service to

the community is expected to be the outcome of our taking advantage of economies of scale that are possible in a large organisation.

"For example, we hope to tap into the department's marketing expertise, and computer support services, particularly the wide area and local area networks. These are services that a small-scale operation like ours was previously unable to afford.

James said that the Observatory had another reason to celebrate 1996.

"It's our centenary year, when several events, such as public concerts under the stars and historical exhibitions at the old Observatory buildings are

planned to mark its passage," he said.

Director of Science and Information Dr Jim Armstrong said that he welcomed the Perth Observatory into the Division.

"The Observatory will broaden CALM's science profile. The science staff of the Observatory has an international reputation and an enviable publication record," Jim said.

CALM's Science and Information Division has been very successful at involving the volunteer community in its research programs. This experience is readily transferable to the Observatory and will greatly assist the scientists there with their community education programs."

"With the Observtory coming into CALM we'll have to think about changing our logo. I think the inclusion of a quarter moon and the Southern Cross would set off our corporate image perfectly!"

The Perth Observatory is in Walnut Road, Bickley, where guided public tours are conducted at 3.00 pr each Sunday. The popul. night tours are conducted one week each month with the next six months fully booked. People wishing to enjoy a night tour should make their reservations well ahead by writing to the Observatory. Groups are also most welcome to book

weekday tours by phoning

(09) 293 8255 between 8.30

am and 4.30 pm.

New year brings fiery answer

• Continued from page 1 terrain to contain the fire. Other major fires in

January were in the Gnangara pines, the Goldfields, areas east of Esperance and at Karijini National Park.

As part of its fire pre- safeguarding their own ention activities, CALM properties from the poten has joined with the WA Fire tial impacts of bushfires.

and Rescue Service and the Bush Fires Board in the 'Summer Safe' public awareness campaign, launched in Perth recently. The campaign centres on stimulating the public to take more responsibility for

Public reports on 'roos

GOLDFIELDS people Up to mid-February CALM had received 150 have been urged to report to their local CALM ofreports confirming sightfice any sightings of kanings of 227 affected kangagaroos showing signs of roos from Menzies, Kalgoblindness. orlie, Coolgardie and Kambalda, with isolated re-

CALM Goldfields Region Manager Ian Kealley said that since kangaroo blindness disease (choroid blindness) was reported in late December, there had fecting only a small perfrom the public.

of individual animals, generally western grey kangaroos, Ian said.

"There's no cause for alarm, as the disease doesn't transfer to humans or other animals, and had no longterm impact on kangaroo numbers."

People are urged to continue reporting any sightings of blind kangaroos, their

cation and details to their

Dr Syd Shea, Executive Director

centage of the population. "Most reports have been

ports from the Nullarbor

Ian said that so far the

disease appeared to be af-

and north of Norseman.

nearest CALM office.

Volunteers who make a difference

TWO Shoalwater Islands volunteers, Eggy Boggs and Hillary Merrifield were rewarded recently for

by Marie McDonald

their dedicated services by the Volunteer Centre of WA.

Each received a 'Difference Award', which is given to those volunteers who have made a positive contribution to the community, to the extent that they have 'made a difference.'

Eggy Boggs was nominated by CALM's Shoalwater Islands Volunteers for her services to

the group. She has coordinated the rosters on Penguin Island for nearly four years.

Her award reads: "Eggy is always cheerful and enthusiastic in her eager participation in all group activities. Eggy's long term preparation of the roster for the Shoalwater Islands volunteer group has been achieved with unfailing patience, good humour and courtesy to others. Her efforts are very much appreciated by CALM ranger-in-charge Terry Goodlich and everyone admirably and reliably on

involved in the group." Hillary Merrifield, also a keen member of CALM's Shoalwater Islands Volunteers since its inception in 1991, was nominated by the Friends of Shoalwater Islands Marine Park. Her award reads:

"Since the inception of the environmental group, The Friends of Shoalwater Islands Marine Park, Hillary Merrifield has been extremely generous in her support. She has willingly served

the committee in a variety of roles and assisted wherever possible. Hillary shares her great knowledge of marine biology and experience of environmental subjects. She is unstinting in her energetic involvement and impresses many with her enthusiasm."

CALM staff at Swan Region would like to congratulate Eggy and Hillary on receiving their Difference Awards, and look forward to continuing a long and fulfilling association with these dedicated volunteers.

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Executive Director of the Heart Foundation, Bob Naylor presents the Heart at Work Award to CALM's Director Regional Services Chris Haynes, while Worksite Health Officer Susan Wall looks on. Photo by courtesy Business Directions

CALM wins Heart Award

CALM has won the 1995 Heart at Work Award for the Most Outstanding Program for more than 100 employees.

Heart at Work awards give recognition to the efforts of organisations working towards improving the health of their staffs; they are offered every two years by the Western Australian Division of the National Heart Foundation, and are sponsored by Business Directions magazine.

The award in the Most Outstanding Program category goes to the organisation that best meets the following criteria:

- · planning through consultation with workplace representatives
- management support and participation
- · employee support and participation
- · availability to all workers
- evidence of evaluation · family and community

involvement broad range of programs

and activities implemented, and

· formulation of policies related to the health of employees.

Principal risk management officer John Ireland said this was an exceptional achievement for CALM, and vindicated the efforts that health and fitness officer Linda Gilbert had applied so diligently in getting the worksite fitness programs up and running.

"Regional and district managers and staff also have reason to feel proud, as without their enthusiasm and willing co-operation, winning the award wouldn't have been possible," John said.

The Heart Foundation's newsletter detailed one of several examples of CALM's management and employee support for the program:

"The employees at

CALM are encouraged to design and implement their own program, with support from management and a health and fitness consultant.

An example of this employee support was shown by the Manjimup work centre, where staff felt that an exercise facility would benefit their program, so they successfully tendered for a job planting trees on a farm, They completed the job over one weekend.

The funds from this work were used to purchase gymnasium equipment and make the necessary modifications to a venue on site to provide a fitness

The January issue of Business Directions magazine had this to say: "With 1300 staff throughout the State, the program successfully manages to reach employees by way of

newsletter, facsimile, email and telephone communication, in addition to regular health and safety training programs. "Workgroups are encouraged to utilise the

facilities they have in their area, ranging from canoeing in Kalbarri's Murchison Gorge and abseiling in Margaret River. Regular exercise is conducted in and around the yards, including bush walking or riding and utilising pooled exercise equipment in CALM gymnasiums."

John said other organisations reading these publications might be encouraged by CALM's success and wish to start their own health and fitness program.

"Those of a similar size to CALM are welcome to contact us for advice, and should phone Linda Gilbert on (09) 334 0397 or send her a fax on 334 0478," John said.



Implementation of plan reviewed

PICTURED above, are Officer Jeanette Gilmour members of the group that and (in front) Ranger-inrecently reviewed the implementation of the Fitzgerald River National Park Management Plan as it approaches the half way stage of its 10-year currency.

They are, left to right, "ational Parks and Nature NPNCA identifying those

Charge Nathan McQuoid.

The visitors were accompanied on their twoday visit by CALM South Coast Regional Manager John Watson.

The next stage of the review will see the earlier, had captured inservation Authority's areas where plan several dibblers, a Don Patterson Brian implementation is behind threatened species, rarely

or new initiatives.

An unexpected find in the north Fitzgerald area provided an excuse for the group to share celebratory drink with CALM consultant ecologist Natasha Baczocha, (pictured below) who a few days

said.

hours of January 17 that Bruce learned that the letter of confirmation had arrived-and he was almost too tired to open the envelope. He had just come from a long, hard day and night of fighting fires at the Myalup pine plantation.

Order of Australia Medal (OAM) for services to the community, in particular, the State Emergency Services (SES).

Bruce awarded OA Medal

house.'

THE first inkling that **CALM** forest worker **Gregory Bruce Withnell** had that he was in line for Australia Day honours, occurred when he arrived home one evening last September, after a day of tree marking, to find a letter from Douglas Sturkey, Secretary to the Governor-General, informing him that he had been nominated.

From September onwards, Gregory (known to friends and work colleagues as Bruce) and wife Kay waited with subdued excitement for confirmation.

"We were instructed to tell no-one, and tried not to let our hopes build up, particularly Bruce, who played it all very low key," Kay

It wasn't until the wee Bruce was awarded the



Collins and Kelly Gillen, with Fitzgerald River National Park Advisory Committee Chairman Bill Lullfitz, CALM Executive

schedule. Steps will then be taken to speed these up, where

appropriate, through redistribution of resources

seen on the mainland and very difficult to capture. (See page 12, November-December CALM NEWS.) Photos by John Watson



"But to this day, the identity of the person who nominated Bruce remains a mystery," said Kay.

Later, another surprise awaited Bruce at Snell's Gardens, where each year the good citizens of Harvey converge for the Australia Day Breakfast. There, the news of Bruce's OAM was announced by compere Nola Merino before most of the guests had time to read about it in their morning newspapers.

"Bruce was totally bowled over," Kay said. "CALM staff were in on the secret, and because he was on call for fire duty that day they agreed that

Gregory Bruce Withnell OAM. Photo by Andrew Smith, courtesy South West Times

by Verna Costello

between them they would cover for him.'

"There have been countless phone calls, and a steady stream of cards and letters from well-wishers await Bruce when he gets home from work each day." Bruce has been a member of the SES for more than 17 years and its co-ordinator for the past five years.

He is responsible primarily for road rescue, also search and rescue, storm damage, welfare (catering at emergencies such as bush efficient work practices. fires) and is highly active in fund raising and promomarried for 29 years and

tion. Because of his effective leadership and dedication, he is acknowledged by his peers as the mainstay of the Harvey SES.

Bruce brings this same dedication and enthusiasm to his work with CALM's Harvey Work Centre, where he lives up to his belief that if a job is worth doing, it is worth doing well. He carries this ethic through as his workmates' representative on the Mornington District's Joint Consultative Committee, which is working together to improve the district's productivity through more

He and Kay have been

moved to Harvey 28 years ago, where they ran a saddlery and chainsaw store for 11 years, before Bruce joined the then Forests Department in 1979.

Kay joined the SES eight years ago, "because I felt I could make a solid contribution-and I'd see more of Bruce," she said.

"Really, we're an SES family-daughters Tammie, who is about to make us first-time grandparents any day now, and Nola, who works for Bunnings, are also active members."

The medal presentation ceremony at Government House is expected to take place some time in April or May.





1995 - Looking back

January

The year begins with a massive salvage operation in the Gnangara pine plantation following a fire that burned 866 hectares of the 7500 ha plantation.

CALM continues its native animal conservation program, Operation Foxglove, with aerial fox baiting in 500 000 hectares of the northern jarrah forest.

CALM's WA Herbarium celebrates the culmination of an eight-year program to build a national specimen database-WAHERB. The initial phase, listing 350 000 plant specimens, is completed.

As a result of Operation Foxglove, woylies can be released safely south-east of Dwellingup to reestablish their range in the northern jarrah forest.

February

CALM announces plans for a record 1.25 million bluegum seedling planting in the Wellington catchment area as part of a 10-year, \$30 million project funded by one of Korea's leading timber companies-Hansol Forest Products Co.

Hon Peter Foss, MLC, becomes CALM's new Minister (and Minister for the Environment).

February 16-wildlife officers free a 1.85m female dolphin stranded on a long mudflat in the Peel Inlet.

CALMfire resources are pushed to the limit during a series of 'blow-up' fire weather days. A four-day bush fire emergency is declared in the South West and more than 400 CALM firefighters and support staff go on full alert.

March

Another dolphin is rescued, this time from fishing line and seaweed off the end of the BHP jetty at Kwinana

Exciting tourism initiatives, including a scenic drive in the Shannon National Park and a viewing and interpretation facility on Penguin Island, are announced.

Above left: CALM's Acting Director of Parks, Recreation, Tourism and Planning Jim Sharp and WMC Corporate Affairs Manager Chris Hawkins admire a Penguin Island wildlife poster produced by WMC. Proceeds from sales of poster will go towards the management of Penguin Island.

Left: CALM's Tim Birmingham demonstrates for the first time, his invention, the Mallee Muncher harvester, which attracts great interest from farmers growing mallee as a eucalyptus oil cash crop. Photo courtesy The Farm Weekly

Below left: Pictured at the launch of the Dryandra Woodland Management Plan are Premier Richard Court, coming to grips with a carpet snake, while senior research scientist David Pearson holds 'the bitey end'. Photo by Norman Bailey of AMPIX



Land Information Branch staff at Como deal with changes to their office accommodation as the crew Holey Fin. from Parks, Recreation, Planning and Tourism Division move in from Pinnacle House.

April

The Valley of the Giants Canopy Walk project is officially launched. The development will include protective boardwalks, sealed paths and an elevated canopy walk, up to 38 metres from the ground.

Project Eden, CALM's ground-breaking wildlife conservation program, takes to the air above Shark Bay for comprehensive aerial fox baiting. The project aims to create a 100 000-hectare haven for rare native animals

CALM staff volunteer their time to undertake an extensive trapping expedition to find and survey the chuditch in the eastern Wheatbelt.

The Mallee Muncher (prototype mallee harvester) proves a hit at oil mallee field days organised by CALM and the Department of Agriculture at Woodanilling, Kalannie and Canna.

May

Quokkas make a surprise appearance at Jarrahdale, near Alcoa's rehabilitated mining area. It is the first sighting of mainland quokkas so far north in many years.

CALMfire reflects on its busiest fire season ever, with 290 wildfires in the Swan region which stretches from Dwellingup to Gingin.

Measures to rescue the Wheatbelt's freshwater Toolibin Lake from salinity are complete. They include a 5.5 km bypass channel that diverts highly saline surface water via specially designed wandoo and steel gates. The rescue mission is a joint effort by CALM, the WA Water Authority, the Department of Agriculture, private landowners and private contractors.

June

CALM celebrates Arbor Day with children from Loreto, South Perth, North Fremantle, Buckland Hill and Kim Beazley schools. They lend a helping hand planting trees and shrubs with Environment Minister, Peter Foss

The Farm Forestry Unit is launched-to provide independent advice to landowners interested in tree crops. It replaces the Department's Vegetation and Tree Planting Advisory Service (VATPAS).

The synergy between nature-based tourism and Aboriginal culture and heritage is recognised through CALM's new Aboriginal Tourism Education and Training Unit.

A humpback whale entangled in a craypot line off Cervantes is freed, using a new technique which involves attaching inflatable buoys to the animal to tire it, so that wildlife officers can get near enough to cut the line.

July

The new Declared Rare Flora List shows the number of Western Australian native plants threat-

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family that visits the beach, has died. Although initially attributed to health problems associated with old age, Holey Fin's death was later found to be the result of haemorrhaging and infection caused by an oject is embedded stingray barb.

July 28: Sad news is received from Monkey Mia.

Holey Fin, the popular matriarch of the dolphin

August

Work begins on a 3.4-km feral barrier across the narrow neck of the Peron Peninsula as part of Project vildlife Eden. The electrified barrier will prevent reinvasion : Shark of the peninsula by feral animals that could prove a project threat to reintroduced native species. enative

More of the world's rarest tortoise, the Western take an swamp tortoise, are released into the Twin Swamps Nature Reserve near Bullsbrook. er the

ironment Minister, Peter Foss, opens the Diamond Tree Lookout in Manjimup. It is the second in vester) the 'Trilogy of Trees'-Gloucester, Diamond and sed by Bicentennial-that can be climbed by visitors to the ture at southern forest.

The first section of the 'new' Bibbulmun Track at Kalamunda is opened. It marks an important point in ahdale. the Building a Better Bibbulmun Project that will he first upgrade, realign and extend the track over the next n many two years

Monkey Mia's sadness over the loss of Holey Fin on ever, turns to joy with the safe arrival of a dolphin calf to her retches eldest female offspring, Nicky.

September

Japan's Mitsui Company and Nippon Paper apinclude point CALM to plant up to 20 000 ha of bluegums on y saline already cleared farmland in the Collie-Darkan region nd steel CALM, as part of a 10-year, \$60 million tree planting project.

A new series of forest adventure activities in The ient of Hills Forest is launched, to complement the popular private Go Bush! program.

13 September: 57 endangered loggerhead turtles are released off Exmouth. The rehabilitated turtles hitched a ride to their release point on the destroyer escort HMAS Swan.

ng hand CALM's unique solar kiln for drying timber refinister, ceives an Australian Design Award and is hailed as a lo st, energy efficient method of downstream processing that will add value to native hardwoods provide 1 in tree and plantation timbers

October

Plans for a major facelift to visitor facilities at sm and Hamelin Bay in the Leeuwin-Naturaliste National through ion and Park are announced.

Access to the Pinnacles-one of WA's biggest : line off international tourist attractions - will be improved as e which a result of a \$700 000 roadworks program announced nimal to by Environment Minister, Peter Foss. lough to

Dive & Snorkel Sites in Western Australia is launched. The book, prepared by CALM with input from staff throughout the State, is designed to help people discover WA's amazing marine environment.

gram for primary schools, is officially opened. It is a joint effort between CALM and the Water Authority ment protection.

biggest and most diverse bushland areas remaining in the region.

The Lake Darlot hemigenia, one of WA's presumed extinct wildflowers is found east of Leonora and CALM seeks to have the population protected.

CALM scientists celebrate good trapping results of the endangered dibbler at Fitzgerald River National Park, where 11 of the animals were caught. The small carnivorous marsupial has rarely been captured on the mainland in such numbers.

19 November: Environment Minister, Peter Foss opens the third and final tree in the southern forest 'Trilogy of Trees'. The Dave Evans Bicentennial Tree is named in honour of Dave Evans who represented the people of Warren as a member of parliament from 1968 to 1989.

CALMfire crews, with support from local volunteers, work to contain a wildfire which eventually runs for four days through the Stokes National Park and Lake Shaster Nature Reserve, west of Esperance. The fire started as a result of lightning strikes and it burned through about 4000 hectares.

December

Premier Richard Court opens the Forest Heritage Centre at Dwellingup, saying it will provide a major boost for the fine wood industry in Western Australia and nature-based tourism in the Dwellingup region.

"The Penguin Experience", a \$320 000 wildlife viewing centre on Penguin Island, is also opened.

Wandoo, a two-year old koala, goes missing from Yanchep National Park. CALM staff are optimistic about his survival because another koala, Bandit, once disappeared for 18 months before eventually turning up in a Wanneroo backyard.

The year ends as it began, with CALM carrying out fire duties. This time, crews go on alert for possible bushfires over the New Year weekend following a series of lightning strikes.

Above right: A CALM presence at National Aboriginal and Islander Week is wildlife officer Trevor Walley. Here, he is with daughter Helen, who is operating a badge-making machine, and Charmaine Champion. Photo by Penny Walsh

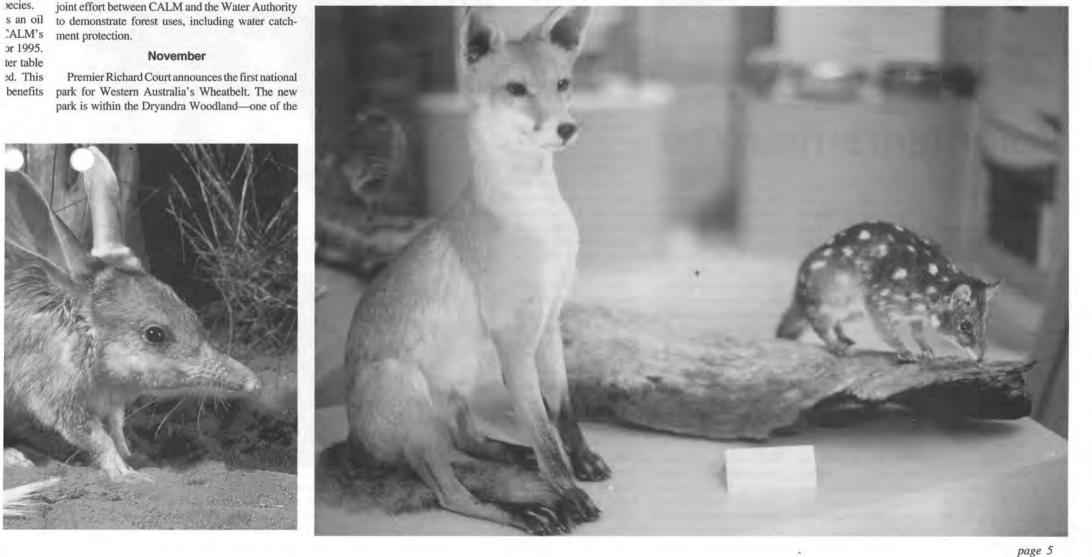
Right: CALM's new Field Officer Cadet Scheme replaces former forestry cadet scheme. Pictured are trainee field officers, left to right, Mark Virgo, Greg Evans, Rebecca Wolstenholme, Stuart Harrison and, in foreground, John Marshall. Photo by Tammie Reid

Below right: Key players in Operation Foxglove, which is controlling fox populations so that native species like this chuditch can return to their habitat. Photo by Verna Costello

Below centre: A bilby bonus. The unexpected reappearanace of the rare and endangered dalgyte (or bilby) follows fox baiting at Calvert Range. Photo by Babs and Bert Wells







ows the The Catchment Carers' Trail, an interactive pro-

s threat-

Eastern Goldfields bio-survey report released-

THE Museum of the Goldfields in Kalgoorlie was the setting recently for the release of the final biological survey report of the system 11 series of surveys of the Eastern Goldfields.

The survey involved the establishment of about 1600 vegetation sites and160 fauna sites, the discovery of five new species of mammal and two of reptiles, and at least 100 species of plants.

The event was attended by 40 local people as well as most of the survey report authors and some of the original members of both the Conservation Through Reserves **Technical Sub-Committee** (CTRC) and the Biological Surveys Committee who recommended, planned and implemented an integrated approach to biological surveys in Western Australia.

Special guests included Ian Taylor, former Minister for the Environment and Member for Kalgoorlie, and Ian Cresswell, from Australian Nature Conservation Agency in Canberra. CALM's regional ecolo-

gist for the Goldfields Andy Chapman, welcomed guests, and provided background to the survey which, began in 1979.

Andy's opening address also recognised the significant contribution that the CTRC process had made to the establishment of a representative reserve system in the Goldfields, as well as the benefits that the formation of CALM in 1985 had conferred.

The field work alone, which took place between 1979 and 1983, involved 3 700 people days.

Guest speakers at the event were CALM's Goldfields regional manager Ian Kealley and Greg Barrett, senior environmental officer for the local gold mining company PosGold Kaltails.

Ian spoke of the value of identifying biologically significant areas to the role of a regional manager, particularly in the regional planning process.

"The report is a magnificent achievement and those who were involved in the survey work are to be congratulated," Ian said.

"With the information contained in the reports, we are now ideally placed whenever the opportunity to purchase pastoral leases for inclusion with existing reserves presents itself.

"It will also be helpful in managing valuable sandalwood resources, as the landform classifications now enable the development of a more detailed sandalwood resource inventory.

"The report is also essential for future monitoring projects, as surveyed sites have now been marked in the field."

Greg provided a mining industry perspective on the value of biological data to the industry.

Both speakers made the point that the survey provided an overview of the region's biota and is not a substitute for site-specific data for environmental impact assessment.

At the conclusion of the



Among those attending the launch of the final survey were, left to right, WA Museum senior curator in terrestrial vertebrates Ric How, CALM principal research scientists Greg Keighery and Norm McKenzie,WA Museum terrestrial invertebrates senior technical officer John Dell, editorial consultant Alex George, and CALM's Director of WA Threatened Species and Communities Unit Andrew Burbidge. Photo by Tony Holmes, courtesy Kalgoorlie Miner

event, 25 of those who attended the launch of the report, adjourned to Goongarrie Station Homestead for a sundowner bar-

The following morning, participants examined wet-

lands on the station which are still a legacy of rain from Cyclone 'Bobby' in February 1995, and examined proposed sites for a future experimental biological survey project, the aim of which will be to compare the effectiveness of a new method of pit-trap setting with the traditional labour-intensive technique.



Earth Carer volunteer Leonie Monks (rear left) and guest Vanessa Holton appear to be listening intently to Perth Outdoors Volunteer Co-ordinator Michael Phillips at the thank you to volunteers function. Photo by Larisa Vanstien

Volunteers thanked

CALM and Albany Museum in two-pronged venture

AS part of its Tourism and Recreation Action Plan, the South Coast Region has developed a closer working relationship with the Albany Residency Museum.

becue, as well as a demon-

"While there has always been close liaison with the Museum, this is now being extended into a coordinated effort to provide information on nature conservation and recreation opportunities for visitors and the local community alike," CALM's South Coast regional manager John Watson said.

"A two-pronged approach is being developed. First, the Museum will become, in essence, a regional interpretation centre, providing visitors with an excellent overview of the Albany area, and encouraging people to then go out and visit national parks and other areas to learn more about the area at first hand. "Local CALM staff will

help with information and input to several new displays, and these will promote nature trails, heritage trails and other visitor facilities, especially in national parks.

"This involved five speakers located at various points along the Point Possession Heritage Trail, near Camp Quaranup, on the Vancouver Peninsula, across the harbour from Albany.

"The speakers included a mixture of CALM specialist staff, local officers from the Waterways Commission, CALM volunteers and Albany Residency Museum Curator Val Milne. "These walks proved very popular, with more than 200 people turning out over the two afternoons. "Billy tea and damper were provided at the end of

"Billy tea and damper were provided at the end of the walks by Rob and Joe Lucas who run Camp Quaranup.

"This success is also a good example of the value of sound communications and willing co-operation within CALM.

"In particular the help we received from Stev volved in The Hills Forest was invaluable, as was the enthusiasm of several local CALM staff, that included Kelly Gillen, Peter Collins, Sarah Barrett, Terry Passmore and Peter Fishwick, plus the concerted efforts of Ian Herford to make it all come together on the day. "We now hope to run

Slavin and Kate Baxter in-

more walks and other achelp tivities with the Museum," Stev John said.



SWAN Region staff kept more than 100 CALM volunteers guessing recently about the content of a special event being held in their honour until five minutes before it was due to start.

The surprise event, Aboriginal Dreaming stories related by wildlife officer Trevor Walley, was the culmination of a highly successful day held in appreciation of the work carried out by volunteers during 1995, and to coincide with International Volunteers' Day. The 'vollies' had been treated to an afternoon of adventure caving, a tour of the park's latest developments, and a sausage siz-

zle, all leading up to the

Trevor's storytelling in Cabaret Cave at Yanchep National Park was dramatically enhanced by his use of the cave wall as a backdrop for his colour slide presentation.

"The audience was mesmerised," said CALM regional volunteer coordinator Marie McDonald, "and all agreed it was a fitting finale to an enjoyable day that celebrated a successful year of high achievement.

"We would like to hold this kind of appreciation function annually, as we believe it is important to acknowedge, in a tangible way, the high degree of commitment and hard work by our volunteers. "By the end of 1995,

Swan Region volunteers had contributed more than 5200 hours, the equivalent of 690 working days," she said.

Echoing the sentiments expressed by Marie, Acting Director of Parks, Planning, Recreation and Tourism Jim Sharp, presented volunteers with Certificates of Appreciation, and pointed out that volunteers enabled CALM to extend its programs and activities further into the community.

As the sun set over Loch McNess, the sounds of birds mingled with that of sizzling sausages, and volunteers yarned and swapped stories of their experiences with fellow volunteers from different districts of the Swan Region.

"Second, we are developing an activities program in conjunction with the Museum, initially for school holiday periods, but if it works well, to run throughout the year.

"This is being modelled on experience already gained by CALM in The Hills Forest," John said.

"In the spring school holidays we ran two 'Family Bush Walks' along similar lines to the Forest Walk held in early 1995 at John Forrest National Park.

Left to right, CALM Southern Coastal Region's planning officer Ian Herford, mountain survey ecologist Sara Barrett, and wildlife officer Peter Collins are seen with Albany Residency Museum curator Valerie Milne and, at front, CALM volunteer Coralie Hortin. Photo by John Watson

Rare sedge found

A recent search for the rare Western Australian sandplain sedge (Restio chaunocoleus) has resulted in the discovery of 4000 plants in the Majestic Heights area, near Toodyay.

The joint survey was carried out by CALM and the Toodyay Naturalists' Club.

CALM Mundaring's nature conservation officer John Carter said that the discovery was well beyond

all expectations, bringing the known total population of the sandplain sedge in WA to 15 000 plants, an increase of 35 per cent.

An earlier discovery of 11000 plants in and around the Badgingarra National Park, 150 kilometres north of Majestic Heights, had enhanced the conservation status of the species.

"We arranged with private owners whose properties had vegetation likely to contain the rare plants,

to carry out the survey on their land," John said.

"As well as a satisfying result, we were also afforded the opportunity to liaise with the owners and discuss species management and general conservation issues.

"The positive feedback we have received from the property owners leads us to believe the long-term future of the sandplain sedge has been enhanced considerably," John said.



CALM volunteer and Toodyay Naturalists' Club member Wayne Clark, examining the rare sandplain sedge. Photo by John Carter

Expedition in April

CALM, in association with the University of Western Australia, is offering nature lovers the chance to join its scientists and regional staff for a 10-day trip in April, to explore and study the wildlife and plants of the biologically rich Great Victoria Desert, 240 kilometres east of Kalgoorlie.

This remote reserve

features woodlands, sandplains and dunefields and is home to more than 10 rare, small mammal species including the sandhill dunnart and the mulgara. Participants may also find evidence of the skink Lerista puncticauda-, in its only known location, as well as 60 other species of reptiles.

More information is

contained in the 1996 LANDSCOPE Expeditions Program, available from UWA Extension, The University of Western Australia, Nedlands, WA 6907, phone (09) 380 2433, or fax (09) 380 1066.

Specific research and project details are available from Expedition Coordinator Kevin Kenneally at CALM, phone (09) 334 0561, or fax (09) 334 0498.

D NOT OVERTAKE TURNING VEHICLE

Back on the ground ... CALMfire Equipment Officer Gary Karavainis (left) and CALMfire Manager Rick Sneeuwjagt, and Senior Operations Manager Terry Maher check out one of CALM's new heavy duty units.

Aerial water bomber on trial

CALMfire's Senior Operations Officer Terry Maher joined fire managers from around Australia recently to evaluate the Canadair CL-415 aerial water bomber during trials in Victoria.

Terry-who reckons he has done more than enough of his share of flying on fire-related operationssays aerial fire-fighting is a highly specialised technique with severe limitations, but it can play a role in helping fire fighters in the early stages of a fire's development.

The \$27 million, Canadian-built CL-415, is a turbo-prop version of the CL-215, which has been used in North America and Europe for almost 30 years.

According to Terry, the plane has the capability to operate under Australian conditions.

Its prime feature is its ability to scoop from water bodies and deliver that water to the fireground in a relatively short time.

"It is an impressive aircraft, but it does have some drawbacks," he said.

"First, it's really only effective if it can begin dumping water or retardant foam within 20 minutes of a bushfire being detected.

"Second, it is a water skimmer so it needs big bodies of water from which to draw and we don't really have those reserves in the south-west.

"While it can pick up off the sea, conditions have to be pretty good. Much of the coverage claimed for this aircraft in Australia comes from scooping seawater and since rough conditions often accompany major fire development, further work is needed to define the limits in using seawater.

"Also, the actual extent of coverage from inland water resources in summer and in drought years need to be determined.

"A third factor is that, being such a heavy aircraft, it would be restricted to

flying out of Albany or sive and it was unlikely Perth, as airstrips such as that a single plane would those at Bunbury, Dwellbe effective, given the mulingup and Manjimup could tiplicity of fires that often not handle it." occurred at the same time

throughout the south-west

in fire suppression is protecting life and property,

the fact is that, as experi-

ence in America has

shown, a big aerial fire-

fighting capability doesn't

stop intense bushfires," he

Terry said the Western

The CL-415 evaluation

Australian experience,

"Although the priority

of the State.

said.

Terry said the success of controlling bushfires largely hinges on getting to the fire before it becomes too intense.

"But if ground forces can't attack the headfire, then aerial water bombers won't be effective, either, he said.

"However, we believe further evaluation is needed of aerial suppression techniques, particularly using light planes, which carry up to 2500-litre payloads.

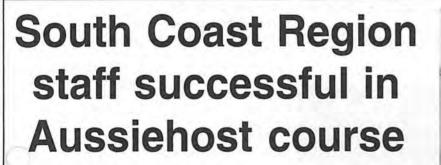
craft are arriving in Australia soon and these may be more suitable for our conditions, especially if used to drop foam in front of the headfire to help slow the fire's spread so ground crews can get in and attack the flames di-

rectly." Terry said the Canadian aircraft was very expen-

with emphasis on wellequipped and welltrained ground forces "New agricultural airsupported by planned fire hazard reduction programs, was the most effective way of lessening the impact of big, uncontrollable wildfires. was co-ordinated by the Australian Fire Authorities

> A report is expected to be available to fire agencies by the end of February.

Council.





TWENTY staff from **CALM's South Coast Region** have officially become Aussiehosts, after attending an internationally recognised training program designed for those in contact with customers.

In a ceremony at the Albany Tourist Bureau, Aussiehost certificates were presented by CALM Acting Director of Parks, Recreation, Planning and Tourism, Jim Sharp.

"The Aussiehost Training Program is particularly relevant to CALM. Both field and office staff are increasingly in touch with visitors (customers), as interest in national parks and reserves, whale watching and wildflowers continues to grow at a fast pace," said CALM's South Coast Regional Manager John Watson.

"We'd been feeling the need to consolidate our skills in the area of customer relations for some time, and the Aussiehost training was just what we needed. This was confirmed by by the enthusiastic response to the program by the staff who attended.

Training was organised through Kay Geldard Aussiehost Co-ordinator of the Albany Business Centre, and was conducted by accredited Aussiehost leader Peter Bonini. Peter is also a

lecturer in hospitality and manager of the Albany Collegiate Restaurant at the Great Southern Regional College of TAFE, where he practices what he preaches.

CALM's South Coast staff join almost 2000 other Western Australians who have completed the Aussiehost Training Program, including more than 150 from Albany, Denmark and Mount Barker.

The region's involvement in the Aussiehost program was organised before the department's new customised training program was made known, and in which it is hoped the region will take part in 1996.

Acting Director of Parks, Recreation, Planning and Tourism, Jim Sharp, Aussiehost Leader Peter Bonini, CALM South Coast Regional Manager, John Watson, Albany Business Centre's Aussiehost Co-ordinator Kay Geldard, and Regional Planning Officer Ian Herford at the Aussiehost presentation ceremony. Photo by Terry Passmore

Fitzgerald River National Park report released

A scientific report on the flora, fauna and conservation values of Fitzgerald River National Park has revealed that it is one of the most diverse areas for flora and fauna in WA. For example, although some 1300 plant species were already known from the park, the survey took this number to nearly 1750-more than those recorded for the entire **British Isles!**

In addition, 184 species of birds, 41 reptiles, 21 mammals and 11 frogs were recorded, including many species that are rare and endangered.

The report was released at an informal launch at Twertup Field Studies Centre within the park.

The survey began in 1985 after the Fitzgerald River National Park Association was successful in obtaining National Estate Programme funding of \$80 000 from the Western Australian Heritage Committee to employ both a zoologist and a botanist for two years to conduct the sur-

vey

as botanist.

tific report at Twertup, CALM's South Coast In due course, Andy Regional Manager John Watson praised the high Chapman (now CALM's ecologist in the Goldlevel of co-operation fields Region) was apfrom all involved. pointed as the zoologist, "The timing of the

CALMScience.

Launching the scien-

and the late Ken Newbey study was crucial, as it immediately preceded the In addition, fifty beginning of CALM's management plan for the members of the Fitzgerald River National Park Fitzgerald River National Park in 1987, John said. Association contributed a total of 407 working "This meant that argudays towards establishments to protect the naing the survey; this inture conservation values volved 50 people whose of the area were based efforts were directed, on fact and not upon aslargely, towards digsumptions or emotions, ging and checking about one of the key principles espoused by Ken

600 pit traps. CALM contributed Newbey." Andy Chapman also with administrative help, ranger assistance, technithanked the many peope

cal advice, materials for who had contributed to the survey, loan of a truck the survey and paid triband drillling rig, and pubute to Ken Newbey, who lication of the results in had passed away the year the April 1995 issue of following completion of the fieldwork.

> The meeting was also addressed by Ian Worth, the son of the late Doreen and Horace Worth, who built Twertup as a residence adjacent to their quarrying business in 1963.

Ian expressed the view that his parents would have been pleased that Twertup had been maintained and used for environmental studies and recreation purposes.

Having Ian and Leila Worth present was a bonus, and the choice of Twertup for the occasion was appropriate to what became an enjoyably nostalgic weekend, that brought together many of the people who helped with the 1985-87 survey.



Andy Chapman and Brenda Newbey at the launch. Photo by Kaye Vaux

Role playing reinforces learning

INTERCEPTING and apprehending 'baddie' was the most popular role-playing component of a recently held Law Enforcement Training Course at Yanchep National Park.

This was despite some of the participants being a tad nervous about making their 'film debut' before a video camera, according to wildlife officers Kevin Morrison and Peter Pennings, who conducted the course.

"For those who had experienced little, if any, difficult encounters, the role-playing provided an opportunity to apply the theory learnt earlier in the course, and to become familiar with some of the devious and obstructive behaviour of a typically difficult baddie," said Kevin.

There was a healthily democratic mix of working backgrounds represented by the eleven CALM field staff taking part in the fourday course-including three forest officers, two



Course participants at the conclusion of a successful course. Left to right, standing: Ken Borland, Ben Tannock, John Webb, Rod Martyn, Matt Dowling, Lyndon Mutter, Keith Tressider, Darren Graham and Luke Bouwman. Kneeling, Nigel Sercombe and Kevin Morrison. Photos by Peter Pennings

Successful goat cull at **Peron NP**

FRANCOIS Peron National Park at Shark Bay was closed from February 2 to 6 while a control program was carried out to remove feral goats and sheep.

The week-long eradication program was carried out by CALM with the help of Agriculture Western Australia.

CALM's former Gascoyne district manager Ron Shepherd said goat control was an important part of Project Eden, CALM's wildlife conservation program.

Key problem

"Goats have been identified as a key problem in managing Western Australia's arid lands," Ron said. "Peron Peninsula has

provided with an ideal opportunity for us to see whether it's possible to eradicate feral goats completely.

"The electrified feral barrier built across the peninsula's narrow threekilometre neck as part of Project Eden will prevent goats from reinvading the area." Ron said that over the past five years about 35 000 animals (15 000 goats and 20 000 sheep) had been removed from the peninsula.

cantly on the annual cull figures for the past two years, but it indicates that helicopter shooting of fr ral animals has been hig effective in achieving an almost total wipe out of the peninsula's feral goat population.

"Because there were so few left for us to pursue this year, and they were more scattered, they were far more difficult to find.

"Even the elements seemed to be conspiring against us, with 45-dgree weather and rain squalls, courtesy Cyclone Jacoball on the one day!

"Nevertheless, the program went well and any small pockets that remain can be targeted on the ground throughout the rest of the year," Ron said.

Other animals to be targeted for removal as part of Project Eden over the next few months include feral cats and rabbits. Fox numbers were successfully reduced in baiting r grams during 1995. If the feral control part of the project continues to go well, CALM may be able to start reintroducing endangered native mammals as soon as late 1996 or early 1997.

operations officers, a reserves officer, a CALM field officer, a national park ranger and the three wildlife officers.

"The course was enthusiastically received by those taking part, with most agreeing that it was highly pertinent to the circumstances in which they might find themselves. They also appreciated the opportunity to see their roleplaying on video, so they could check how appropriate their own behaviour was in the face of difficult clients, whose behaviour might be considerably less than civilised."



Trainee wildlife officer Ben Tannock identifies himself to a 'baddie' while the action is captured on video by Matt Dowling for later review.

"What have we here?" Ben Tannock removes a bundle of illegally picked Stirlingia latifolia from 'baddie' Kevin Morrison's vehicle.

"These animals are difficult to target because they don't generally enter trap yards or go to artificial watering points," Ron said.

"Helicopter shooting appears to be the only viable option, and in the past two years 2565 goats have been destroyed in 70 hours of flying."

"This February's control program has seen 279 goats eradicated in about 32 hours' flying time. "This is down signifi-

Benefits

Already, the nature conservation benefits of feral goat control are clearly visible on the peninsula.

The natural vegetation has significantly regenerated in the past five years. Small bird populations have increased, including the threatened thick-billed grasswren.

The euro population, restricted to two small coastal pockets, has spread into inland areas of the peninsula.