CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

AUGUST-SEPTEMBER 1994



- Sea snake warning page 2
- Whale shark tourism bonanza - page 2
- Roadside conservation awards - page 3



- Endangered matchstick recovery - page 4
- Treepark tourism - page 4
- **CALM** tops safety awards - page 5



- Promoting the biosphere - page 6
- Kimberley feature - page 7
- Rare tortoise and parrot finds - page 8

A forest of fine Fellows-



Four CALM staff have been elected as Fellows of the C E Lane Poole Memorial Trust. They are seen here being congratulated by WESFI chairman Denis Cullity (centre). From left to right, they are: Derek Winters, principal health and safety officer Tom Wood, Mervyn Smith, Alan Hordacre, Michael Cully and CALM's Executive Director Dr Syd Shea. See story page 3. Photo by Greg Wood

CALM's new 1 lbis marine role

arine conservation areas under a new strategy announced by the State Government.

The strategy involves setting up a Marine Parks Authority similar to the existing National Parks and Nature Conservation Authority for terrestrial areas.

A marine branch will be established within CALM to provide the secretariat for the new authority and the day-to-day management of marine conservation areas.

CALM Executive Director Syd Shea said the Government's continued support for CALM's role in marine conservation reserve management would enable the Department to plan future commitments.

Corporate Executive would be taking steps over coming weeks to strengthen CALM's marine capability and expertise.

Other key components in the strategy unveiled by Premier Richard Court recently include: The adoption of a three-tiered approach to ma-

- rine conservation reserve categories. Specific guidelines for access by petroleum ex-
- plorers and developers in certain categories of marine conservation reserves.

continued on page 2

- a unique concept

THE Ibis Aerial Highway, launched this month by Western Australian Premier Richard Court. will provide a massive boost to tourism in the Kimberley.

Under this unique marketing concept, private tourist operators are providing plane or helicopter flights to tourist attractions in wild, remote parts of the Kimberley.

Visitors can create their own itineraries by choosing which remote attractions they wish to visit and which ground tours or sea charters they would like to link up with.

The aerial highway is a joint initiative of the Government and private tour operators.

The Kimberley region is one of the world's last great frontier destinations that can be experienced in



safety and comfort.

The Department of Conservation and Land Management, in consultation with the Kimberley Tourism Association, the WA Tourism Commission and local operators, has produced a full-colour marketing brochure for distribution to tourism outlets in major Australian and international markets.

The brochure aims to create a sense of excitement about the Kimberley's magnificent national parks, wildlife and other natural attractions and should help draw more visitors to the region.

The Ibis Aerial Highway will allow people to visit isolated destinations quickly and easily, and with minimal environmental

Airstrips have been built at the main visitor points, such as Bell Creek Gorge, Windjana Gorge and El Questro, to enable sightseers to join tours by bus, boat or four-wheeldrive.

They can also choose to stay overnight at station homesteads or wilderness areas such as Cape Leveque, where comfortable accommodation is available.

The Kimberley has a number of world class attractions.

They include the Rowley Shoals, with its luxuriant untouched coral atolls offshore from Broome, the spectacular Bungle Bungle in Purnululu National Park, mosscovered waterfalls in the Prince Regent Nature Re-

continued on page 2

New audit unit formed

A NEW Environmental Audit Unit will be set up in CALM.

Executive Director Syd Shea said the unit would be responsible for monitoring environmental standards and ensuring compliance with Departmental policies and procedures and Ministerial conditions in all commercial forestry operations.

Dr Shea said the move was part of the Department's overall commitment to provide a greater business focus to its forest operations through the creation of the State Forest Resources and Afforestation business units.

"The business units will provide CALM with a high standard of public accountability," he said.

"The work of the new Environmental Audit Unit will be in addition to the internal monitoring arrangements of each of the business units and will report directly to me.

"Its creation further strengthens the Department's accountability procedures."

Dr Shea said the new unit would deal with internal and external complaints. A protocol for handling these complaints would be drawn up.

"In this regard, I intend that the unit will have full powers of investigation and the ability to require compliance with its directives,"

Project officer Paul Jones is the acting manager of the unit and will be responsible for appointing staff and formalising the unit's functions.

Dr Shea said the business units and the environmental unit reflected the Department's ability to respond to change.

"The Department is responding quickly and adapting to new policy directions such as moving towards becoming a selffunding agency," he said.

nage 1

FROM MY DESK .



Over the past several weeks astute members of CALM would have noticed that another 'save our forest' campaign has been launched.

It is, of course, a legitimate right of any member of the community or organisation to take whatever action they wish, provided it is legal, to draw the attention of the public to their point of view.

Unfortuantely, one of the by-products of people exercising their democratic rights is that people who work in public organisations like CALM have to cop a fair bit of denigration in one form or another.

The first time around is easy to take, but for some of you who are experiencing their 50th campaign, undoubtedly, like me you feel a bit weary.

Apart from the material printed in the newspaper there is a considerable amount of abuse poured on CALM generally, and me in particular in private correspondence, which, if the authors had the courage to sign, has the potential to yield a reasonable commercial return to CALM from defamation actions.

The great forest debate will continue interminably, but a few things I think need to be made clear with respect to CALM's position.

Firstly, we, as a public service organisation, don't determine land use policy. It has been the choice of successive democratically elected governments, of different political persuasions, to permit the utilisation of our native forests for the production of timber

Secondly, CALM is consistently accused of criminal activity (one spokesperson for the Conservation Council in a radio interview recently talked about 'crimes against humanity') because timber harvesting occurs in native forests.

But even if CALM had the power to determine whether timber harvesting occurred, what would be the motive for the 'crime'?

Up until this year, CALM did not retain revenue gained from timber harvesting and if revenue from timber harvesting wasn't available, the Government would still pay CALM salaries.

Undoubtedly, CALM would receive less flak if we kept our heads down and made no response to criticisms or any contribution to the debate about conservatiuon and utilisation of our natural resources.

What some of our critics find difficult, however, is that we are not prepared to lie down and have outright lies told about what we do, nor will we let the prophets of political correctness and pseudo science have the media to themselves.

Those critics are prepared to dish it out but are not prepared to take it.

I believe it is essential that we have people who are prepared to examine and criticise what CALM does, but I also believe it is essential that we put our view to the public.

If we don't, we will have a continuation of the current absurd situation where the major factors affecting conservation of our unique flora and fauna feral animals, Phytophthora, and rising water tables will not receive the attention from the media, the community and politicians that they deserve because of a preoccupation with the ideological debate over forests.

Dr Syd Shea, Executive Director

Sea snake warning

CALM has warned people not to touch seasnakes, after a live one was found on a Bunbury beach recently.

It was the second seasnake reported on southwest beaches in two days.

"The yellow-bellied seasnake is an oceanic species. It is highly venomous but not aggressive," CALM wildlife officer Andrew

"No human deaths from this animal have ever been recorded in Australian waters but we recommend that

they are treated with extreme caution. "Seasnakes are found on south-west beaches from time to time follow-

ing winter storms. "Anyone who finds one should immediately con-

tact a CALM wildlife officer "

Andrew contacted Underwater World, which agreed to care for the animal so that it could be returned to northern waters.

However, it died soon after arriving at Underwater World. Previous attempts at keeping the species in captivity had also been unsuccessful.

Whale sharks a feast for tired tourist eyes

THE mysterious whale shark - the biggest fish in the world - provides a boon for tourist operators, the Exmouth region, and those lucky enough to swim with these massive creatures.

"Many people regard the chance to dive with the giant fish as the experience of a lifetime and visitors from all over the world arrive in Exmouth during the season from mid-March to mid-May," CALM district manager Doug Myers said.

"Ningaloo Reef is the only place in the world where whale sharks are known to appear regularly, in sizeable numbers, in near-shore waters easily accessible to divers.

"Sixteen charter operators were licensed to take people whale- shark viewing this year," he said.

"Most use spotter

planes to pin-point the sharks, then manoeuvre their vessels to drop up to 10 people at a time near the animals, which can be between four and 14 metres long."

Ningaloo is also a mecca for film-makers compiling documentaries, and marine researchers seeking to uncover the mysteries of this animal.

This season, CALM wildlife officers Don Noble, Doug Coughran, Peter Lambert and Peter Pennings travelled to Exmouth for two weeks at a time, to monitor the whale shark and whale shark

CALM's whale shark watching guidelines prevent the sharks from being harmed or disturbed and keep interaction between people and fish to an acceptable level.

The four wildlife offic-

ers skippered the wildlife boat Pseudorca II, and were ably assisted by CALM staff from the Exmouth district and a number of enthusiastic volunteers.

While working in the area they were also kept busy towing crippled vessels, ensuring other marine park users abided by the park regulations and other tasks.

While patrolling the park, the Pseudorca II crew record as much data on the whale sharks (numbers, length, sex, distribution and so on), tourist operators and human interaction as possible.

Tourist operators and spotter plane pilots also record for CALM data, on their contacts with whale sharks, whic is then collated by marine park manager Sue Osborne for analysis.

continued from page 1

serve and a remarkable Aboriginal culture.

The region's wildlife is also diverse and unusual. Waders fly to the Kimberley from as far afield as Siberia, saltwater and freshwater crocodiles are seen in tidal areas and gorges, and wallabies and kangaroos are visible and

As a result, the choices available on the Ibis Aerial Highway are just as diverse. Tours on offer include going helifishing for barramundi, crocodile spotting near Kununurra or flying over the amazing horizontal waterfalls north of Derby.

"Fortunately, you can now enjoy the Kimberley and its wild, remote places without a four-wheel-drive and an enormous amount of time," Mr Court said.

"As a result, the Ibis Aerial Highway will help bring people closer to nature in the Kimberley.

"It is a good example of what can be achieved by encouraging nature-based tourism in this State."

Mr Court said nature-

based tourism could also greatly benefit and help protect the environment.

"Dollars generated by quality nature-based experiences can fund major conservation initiatives and can be used to manage our national parks and other conservation areas," he

"And because our natural areas and their wildlife are actually helping to generate valuable tourism income, the entire community has a vested interest in ensuring they are conserved in their pristine state."

Environment Minister Kevin Minson said the Ibis Aerial Highway also had the advantage of having a very low impact on the er vironment.

"For instance, there is no need to build roads through remote wilderness areas or use a four-wheeldrive because you can fly to them direct."

"Now that the Ibis Aerial Highway has been established successfully in the Kimberley, I would like to see similar aerial highways in other parts of the State."

New gear for two fire units

CALM has allocated \$50 000 towards fire equipment for volunteer fire brigades operating in Albany and Collie.

The units are being supplied as a result of recent agreements by CALM to establish 10 000 hectares of bluegum (Eucalyptus globulus) plantations with the Korean company Hansol Forest Products at Collie and a Japanese consortiv in Albany.

continued from page I

- The release for public comment of a comprehensive report on a representative marine reserve system for Western Australia that had been prepared by a working group chaired by CALM's former Director of Nature Conservation Dr Barry Wilson and comprising some of the State's foremost marine scientists.
- Ban on petroleum drilling and production in Ningaloo Marine Park.

In announcing the strategy, Mr Court said the National Parks and Nature Conservation Authority had done an admirable job in administering the marine parks that had been set aside in the past 10 years.

But the expected increase in the number of marine conservation areas warranted a separate vesting authority whose members were experienced in marine issues.

The new authority will have representation from a wide range of interest groups including conser-

vation, commercial fishing, recreational fishing, other water-based recreations, tourism, marine science and the petroleum industry.

As well, a scientific advisory committee comprising marine scientists from the non-government sector, research institutions, the WA Museum, Fisheries Department and CALM will be appointed.

The existing marine nature reserves and marine parks categories will continue. Petroleum exploration and drilling will be

excluded from marine nature reserves and from sanctuary and recreation zones in marine parks, but will be provided for elsewhere in marine parks in appropriate zones, subject to Environmental Protection Authority assessment.

A new reserve classification called a Marine Management Area will be established. Legislation to amend the Conservation and Land Management Act will be introduced to provide for this additional classification.

The report of the scien-

tific working group into a representative marine reserve system for Western Australia is the most significant marine conservation document released anywhere in Australia.

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

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 typewritten details to:

> The Editor, CALM NEWS. Corporate Relations Division

FOR SALE

Seven battery operated Grant & Rustrak chart recorders for monitoring temperature, and blank recording charts. (Temp. probes not included), \$20 ea. Phone Joe Kinal, (09) 538 1105.

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

THE following letters were sent in to us by John Forrest National Park senior ranger George Duxbury. The letters sing the praises of Avon Valley National Park rangerin-charge Trevor Smith and mobile ranger Tony

Tapper who arranged a full-scale search for two lost children.

Dear Sir,

On Sunday 5 June, we, our two daughters, and a group of friends visited the Avon Valley National Park for what was supposed to be a good old Aussie picnic.

It ended up anything but when our 10-year-old daughter Asha and her girl friend, also 10 years old, became separated from us and, despite the efforts of our group, were lost.

They were eventually found some three hours later at 4.30 pm but not before your park rangers had conducted a search of the area

themselves and, with a great degree of calmness and concern, advised us they had arranged a full-scale search.

Would you please convey to the rangers involved our heartfelt thanks. Their professional approach and kind, reassuring words were extremely helpful and their efforts will never be forgotten.

Enclosed is a note from our daughter. We would be most grateful if you would forward it to those concerned.

Yours sincerely, Pat and Ret Golding, Parkerville.

Dear rangers,

Thank you for helping to look for me and Ashleigh

yesterday. We did not mean to get lost. I'm glad we were found before dark. We were scared.

Love from Asha.

Dear Sir.

Please pass on my appreciation to the park rangers who co-ordinated the search for two lost children in Avon Valley National Park. They calmed a potentially panicstricken party and searched for the children for two and a half hours.

The children were disoriented, genuinely lost and distressed at the time I found them, about 4 km from the picnic site.

They had seen men during the time they were lost, and being aware of

'stranger danger' they discussed it and decided not to ask the men for help. (Perhaps this scheme works too well!)

Please personally thank the two rangers concerned. their help was greatly appreciated.

Doug Monk (Father of Ashleigh-Ann)

Dear sir,

My name is Ashleigh-Ann Monk. I was one of the two lost children in Avon Valley National Park.

Please thank the people who looked for me while I was lost. I am sorry to put these people to so much trouble.

Thank you. Ashleigh-Ann Monk.

page 2



CALM NEWS — AUGUST-SEPTEMBER 1994 Managing Editor: Ron Kawalilak

> Editors: Nigel Higgs, Verna Costello Contributing Editors: David Gough, Helenka Johnson, Carolyn Thomson

Design, Layout and Production: Sandra Van Brugge Published by CALM Corporate Relations Division, Cygnet Hall,

(cnr) Mounts Bay Road & Hackett Drive, CRAWLEY, Western Australia 6009 Telephone: (09) 389 8644 Facsimile: (09) 389 8296 Story deadline for CALM NEWS is the 10th of the month preceding the month of issue.

Printed by Lamb Print. PRINTED ON 100% RECYCLED PAPER

For they are jolly good **Lane Poole Fellows**

FOUR CALM staff members have been elected as Fellows of the C E Lane Poole Memorial Trust.

Recipients of the Fellowships, who had won annual study awards for the past three years, were: Kelmscott forest management staff members Merve Smith and Derek Winters, Kelmscott District landscape planning officer Alan Hordacre and Manjimup Research Centre technical officer Mike Cully.

The 1992 awardees Mery Smith and Derek Winters used their study awards to jointly study computerised forest planning systems in the Australian Capital Territory, Victoria and Tasmania.

The 1993 awardee Alan Hordacre studied landscape management and timber harvesting in Tasmania and Victoria.

The 1994 awardee Mike Cully, (see p.5 June-July CALM NEWS) will visit by Greg Heberle

New Zealand, Tasmania, South Australia, Victoria and Queensland to study aspects of tree breeding, mainly relating to radiata pine and bluegum.

A function was held at Crawley to celebrate the occasion and present commemorative certificates to the winners of the Fellow-

Chairman of the Trustees Dr Syd Shea opened proceedings and outlined the history of the Trust and the man after whom it is

The awards were established in 1983 to provide opportunities for foresters to study in the eastern states, and to perpetuate the memory of Charles Edward Lane Poole, first Conservator of Forests (1917-1922) in Western

Lane Poole was appointed in 1916 to Head

the Woods and Forests Department, set up some twenty years earlier as part of the Lands Department.

In 1918 he drafted the Forests Act which came into force in January 1919, and he was responsible for the initial dedications of State forest and for formulating forest regulations.

He was also closely involved in the start of research into pulp and paper manufacture in Western Australia, initially at the Perth Technical School.

Fellowship award certificates were presented by Denis Cullity the Chairman of Westralian Forest Industries Limited (WESFI), which has been the chief financial contributor to the study award scheme since it was set up in 1983.

Mr Cullity then gave a potted history of the award and WESFI's involvement.

When his father, the late Thomas Cullity, graduated from the University of Western Australia as a Civil Engineer in 1918, Lane Poole promptly offered him a newly created position of utilisation officer in the Forests Depart-

After a year with the Forests Department, he resigned, but he maintained an interest in forestry and timber for the rest of his life, was founder of Cullity Timbers in 1928 and Westralian Plywoods in 1943; WESFI was formed from these companies.

Since 1983, there have been nine other CALM field staff who have won awards. They were:

- · 1983 Paul Marsh,
- Ray Fremlin 1984 Graeme
- Hutchinson
- 1986 Gerard Van Didden, Tony Brandis
- 1987 Peter Keppel
- 1989 Greg Voigt
- 1990 Andre Rynasewyez
- 1991 Greg Mair.



Dwellingup overseer Merv Burt, left, and forest worker Allen Clarke 'bucket their way around in a cherry picker. Photo and story by Grant Lamb

CALM-Alcoa joint pruning exercise

CALM Dwellingup is reaching new heights with its Alcoa works program.

The infrastructure maintenance carried out by CALM Dwellingup crews for Alcoa's Huntly minesite was given some extra work when serious pruning around the minesite powerlines became necessary.

Alcoa supplied the mobile cherry picker and operator, while CALM Dwellingup supplied the workers to staff the bucket and do the

The cherry picker could reach a height of 23 metres, and six metres out and down.

This was just the shot to reach down steep embankments, under powerlines or to extend to overhanging

All major powerlines were isolated and power cut off while the work was carried out.

CALM Dwellingup looks forward to further diversifying its works program with Alcoa Huntly.

Photo by Verna Costello

Family was the focus

SENIOR research scientist David Pearson, above, talks to one of the many schoolchildren who dropped in to look around CALM's display at the WA launch of the National Aboriginal and Torres Strait Islander Week.

With him is Shane Garlett who is showing his son Shane junior a Stimson's python.

Also on duty were Aboriginal employment and training officer Maxine Chi, Aboriginal liaison officer Noel Nannup, and Yanchep National Park ranger Hardy Derschow. The celebrations, which were held at Clontarf Aboriginal Community College, were part of the International Year of the Family and focused on the vital role of the family in uniting Aborigi-

nal people.

Revived roadsides awards

ROADSIDE Conservation Awards, partly sponsored by CALM, were presented at the recent Local Government Week Conference to Mullewa Shire, Aboriginal trainees representing Hamersley Iron, and Main Roads

The awards are an initiative of the Roadside Conservation Committee, chaired by John Blyth, a scientific advisor in CALM's WA Threatened Species and Communities

CALM's full-time executive officer on the Committee is David Lamont, who, John claims, carries out the lion's share of the work

The Roadside Conservation Awards are presented to Western Australian individuals, groups or organisations who have made practical achievements in the sympathetic management, restoration or revegetation of the rail or roadside environment.

There are three categories: local government roads; State government roads; and gravel pit rehabilitation.

Entries were judged by a panel selected by the Roadside Conservation Committee, and chaired by John Blyth.

Main Roads WA, Greening Western Australia and local government were also represented on the panel.

Because of its responsibilities under the WA Wildlife Conservation Act, CALM was made lead agency for the newly established Roadside Conservation Committee in 1985; the aim being to promote the conservation and restoration of rail and roadside vegetation.

Kevin Minson, who presented the awards, said that roadside vegetation was vitally important - it provided an example of the State's floral heritage - and was one of the features that

"Many endangered species are found only on road verges and grow nowhere else, he said."

tourists came to Western

Australia to see.

"During the last decade, community and government awareness of the importance of roadside reserves has increased dramatically."

Mullewa Shire won the category for local government roads. The Shire helped conserve and rehabilitate roadside vegetation by encouraging landowners to voluntarily set back new fence lines by at least five metres, and by planting native vegetation along Shire roads.

This was done within an overall set of guidelines developed by the Council for managing all road reserves within the Shire.

Mr Minson said this was

Environment Minister a model he would like to see followed by other local government authorities within WA.

> Hamersley Iron won an award for its landform rehabilitation on the 386-km Dampier-Paraburdoo rail/ road corridor.

> Mr Minson said that this was a large and ambitious project and was especially significant because local Aboriginal people were employed and trained to carry out the work.

> "A number of these workers flew down from Karratha to accept the award," he said.

> "The work, begun in 1992, involved re-establishing landforms and encouraging the original plants and animals on old pits, construction camps and roadside windrows along the corridor."

Mr Minson said the corridor ran through rugged Pilbara terrain from Dampier, through Millstream-Chichester National Park, rising to 742 metres at Mt Tom Price and then to Paraburdoo.

"Eighty km have been

completed so far and the countryside is now returning to its natural state," he said.

The Bunbury division of Main Roads WA won the State Government roads category, for revegetating the South West Highway between Yornup and Palgarup.

"They used direct seeding to establish an understorey beneath existing blackbutt stands. This linked stands of vegetation together and helped improve the habitat for local wildlife," Mr Minson said.

"This work also helped to enhance the landscape along what is an important tourist route."

John and David are especially pleased with the range of initiatives recognised by the awards this

"With winners of the three categories representing local government, industry and State government, it's clear that there's an increasing acceptance of the roadside values promoted by both CALM and the Committee," they said.



Left to right, Photographed with Environment Minister Kevin Minson, third from left, are Wayne Stevens, Rex Parker, Stuart Robertson, Terrence Mills and Michael Hyland after the 1994 Roadside Conservation Awards ceremony. Photo by Greg Wood

Scuba skills scrubbed up at Rottnest diving site

IF CALM wildlife officers are called out to a marine emergency they will certainly be well prepared.

A number of them went to Rottnest Island last month to brush up on their SCUBA diving skills, iron out problems with equipment and so on, so they would be ready if called upon in a hurry

The session was run by supervising wildlife officer Doug Coughran, with the help of Peter Lambert and Don Noble.

Greg Pobar, a CALM officer on secondment to the Rottnest Island Auprovide local knowledge of the area. It was in accordance with CALM's Scientific Diving Code of Practice, with the emphasis on safe diving proce-

Wildlife officers Brad Daw, Warwick Roe, Peter Pennings and Lyle Gilbert, and media liaison officer Carolyn Thomson attended the session, which was a resounding

All are already qualified SCUBA divers on CALM's diving register.

"It was a good opportunity for participants to keep up their skills and experience diving in diftions," Doug said.

"In winter, for instance, SCUBA divers need to be particularly wary about hypothermia and heat loss in water.

"We held the last one in autumn and plan to hold a skills dive in every season of the year. The next will be in spring and will be run by Peter Lambert."

Doug ran through procedures to be followed in a diving emergency, reviewed hand signals and everyone checked and assembled their equipment.

Then the enjoyable part of the day began with the practical diving ses-

Participants practised clearing a flooded mask, swimming on SCUBA without a mask and carried out an ascent while buddy breathing.

Then they had the chance to explore the dive site (Dyer Island), its reefs and marine life.

The dive was also an excellent opportunity to check sites for inclusion in a book to be published by CALM on dive sites in WA.

On the way home the group was treated to a spectacle by three playful humpback whales on the seaward side of Rottnest, en route to breeding areas



Peter Lambert refines his SCUBA skills. Photo by Doug Coughran

Endangered matchsticks

PRIVATE landowners in the Brookton area are helping to bring the endangered matchstick banksia (Banksia cuneata) back from the brink of extinction.

Two landowners, Gary Graham of Quairading and Simpson Popanyinning, are members of a recovery team formed to save the species.

Populations of the plant on their properties were recently fenced off to protect them from stock.

Another Quairading landowner, Russell Stacey, by Carolyn Thomson

has allowed CALM to use his property for direct seeding trials, beginning this

The recovery team also has members from CALM, the Australian Nature Conservation Agency, Men of the Trees, the Water Authority and the Main Roads

"The enthusiasm from local landowners is one of the highlights of the recovery plan," CALM operations officer Greg Durell said.

"It is fantastic that private individuals are becoming involved in flora conservation."

Greg said that Judy Williams, of Brookton, had been contracted by CALM to carry out a census on matchstick banksia and to map known populations of the plant.

"This information will allow us to monitor these populations in the future,"

"The department recently found three more plants in a new population, bringing the total number of plants to 500 in 11 populations.

"However, there could be more of these endangered banksias elsewhere and we ask anyone who knows the whereabouts of more plants to contact their local CALM office."

Matchstick banksias flower from September to December and have striking cream to pink, spiky flowers that resemble matchsticks.

Further enquiries Judy Williams on (096) 421 047



Tree park tourism

A JOINT project between CALM and the Balingup community, to develop the Golden Valley Tree Park, is just beginning to blossom.

"The tree park will become a local tourist attraction, aiming to promote the growing of trees and the preservation of endangered species. It also has a very important educational role," CALM district manager Peter Bidwell said.

"It features both native and exotic species of hardwoods and focuses on endangered species around the world."

On one side of the road there are species such as weeping willows, poplars and oaks, while the other side features Australian eucalypts, including a few Goldfields species.

"At the moment we are establishing a rainforest area in one of the valleys," Peter said.

"Golden Valley features walktrails, scenic lookouts, a picnic area, gazebo and a maypole. It currently attracts up to 10 000 visitors a year.

"It is particularly beautiful in spring when the countryside is green and in autumn, with the colour changes of the European species.

"We're very pleased the community is involved in a voluntary capacity."

The old homestead on the property is currently being renovated and will be developed as a Tree Resource Centre and caretaker's residence.

It has historic importance, has been listed by the National Trust, and placed on the Heritage Council's interim list.

Peter said a retired builder, Helmut Hiddel, was working for CALM on a voluntary basis as a technical advisor for the restoration.

"Helmut restored many old homes in Europe after Word War II and is now passing on his invaluable knowledge and skills to CALM staff and other volunteers," he said.

The land was originally purchased by the old Forests Department to establish a pine plantation.

When CALM began to manage the area, the homestead was almost falling down.

Some of the renovation work was completed by LEAP workers, but now most of the work is being undertaken by CALM staff with the help of local vol

"We hope to build the tree farm up as a tourist attraction to become selffunding," Peter said.

Oil seed orchard set to become export earner

A SEED orchard near Collie for oil-producing mallees is an important initiative to help Australia to regain world dominance in euc-oil pro-

Collie MLA Dr Hilda Turnbull, inspected the seed orchard established by CALM recently. She said euc-oil had enormous potential as an industrial solvent.

Existing solvents were being phased out under international conventions on protecting the earth's ozone layer.

CALM is using the orchard to breed super trees able to produce extremely high quantities of eucalyptus oil. There are also seed orchards at Merredin and Newdegate.

Oil yields could be increased to levels which could make mallees a competitive crop in their own right within five to 10 years.

CALM, the Department of Agriculture, the Department of Commerce and Trade and Murdoch University are currently assessing the feasibility of the fledgeling industry.

The Government is spending up to \$2 million over the next three years helping Wheatbelt farmers establish eucalyptus oil-producing mallee

The first year of this program is now under way, with farmers planting pilot commercial trials at Canna, Esperance, Woodanilling and Lake

Toolibin, Narembeen and Kalannie.

A total of 1250 hectares will be planted this year and eventually each of the six areas will have about 5000 hectares under mallee.

Those plantings will be the foundation on which to develop and demonstrate the potential for a largescale industry.

CALM was also establishing an arrangement with Botanical Resources Ltd headed by Professor Alan Barton of Murdoch University.

Botanical Resources had already done much work on the chemistry of euc-oil.

CALM and the Department of Agriculture would co-ordinate all aspects of oil mallee research and development.

Oil mallees are the missing link in the agricultural conservation chain

Most tree plantings on Wheatbelt farms have been aimed purely at conservation, but euc-oil offers farmers an economic return so the benefits are two-fold.

CONCEPT-ualising

DEDICATION, late nights, and unsung heroes have been responsible for the relatively smooth transition to a new integrated personnel and payroll software package called CON-CEPT.

Actually, it was more a case of 'smooth on the outside and frenzied on the inside,' with staff being paid each fortnight as usual, unaware of the intense activity going on elsewhere.

But it was the total commitment and determination on the part of Wanneroo District officer ate Didlock, Finance Branch payroll officer Heidi Moss and Human Resources personnel and training officer Steve Grasso who, with a supporting network of dedicated administrative staff at all levels throughout the State, were responsible for the success of the operation.

It meant working into the wee hours of the morning, plus a fair bit of finby Tammie Reid

ger-crossing when transferring salaries and wages into staff members' accounts before Reserve Bank deadlines ... but the dollars were there for us ... just.

Heidi says the new package has combined four systems into one:

The Personnel Information Management Systems (PIMS), salaries system, the wages system, and salary allocations system.

"This means that all information relevant to a staff member is keyed in to the one system and, with just a few key strokes, any or all pieces of information for that person can be called up on screen," she says.

provides a wider range of detailed information more quickly than the old system; it's a boon for those involved in program costing and financial reporting.'

"It's user-friendly and

Accountant Ian Frame says that while there are still some complexities to unravel, the new system is already providing substantial cost savings for CALM

"For example, salaries were processed by Lend Lease Bureau, a private organisation that gave us excellent service, and cost us just over \$50 000 a year.

"Now, this will be processed on CONCEPT along with PIMS, formerly processed by Government Bureau Services also at a cost of just over \$50 000 per year.

CONCURRENT, the former computer on which wages and salary allocations were run was about seven years-old and, like other outdated technology, was much slower to operate and expensive to maintain.

"Eventually, when all the 'wrinkles' in the system have been ironed out, any staff member will be able to call up on his or her personal computer any in-



the new CONCEPT package. Photo by Tammie Reid

formation to which they are entitled, such as up to date leave entitlements, or whether or not salary allocations have been made on time, and so on.

The switch-over took slightly more than three

months with a great deal of co-operation and support from Information Systems, Finance, Human Resources, and supplier representatives Rob Fox and Eileen Aitken.

Principal personnel of-

ficer Erica Scott was full of praise for Heidi and Kate and all administration staff involved in getting the system up and running.

"Without their commitment to making the system work and their determination to get the pays through, people just wouldn't have received their cheques on time.

"The resulting uproar if that had happened doesn't bear thinking about," Erica said.

SPANIP.

Jan Gordon working at the microfiche reader on the Cunningham manuscripts.

Photo by Kevin Kenneally

Jan's sadly missed

THE Herbarium staff and volunteers have been saddened to hear of the death of Jan Gordon after a long illness.

Jan was one of the earliest members to join the Herbarium volunteers and brought with her a wealth of experience in volunteering; her good nature and cheerful disposition endeared her to all.

Jan had a particular interest in historical research and approached me with an offer to assist in transcribing the unpublished Kimberley voyages of the important botanical collector Allan Cunningham.

This was an extremely arduous task, working

by Kevin Kenneally

from microfiche and puzzling over the waterstained and weatherbeaten journals, often interspersed with complex botanical names and all written in a tight hand.

Jan immersed herself in the task, often visiting the Battye Library in her own time to obtain further background information on the man and the area from other explorers journals and manuscripts.

She was thrilled, when in October 1993 on a visit to the Archives Office of New South Wales, I was given access to the original journals and presented her with photographic copies of some of the sketches it contained.

By the end of 1993 and with her health deteriorating, Jan was forced to give up the project.

However, she never lost her enthusiasm for living life to the full and remained confident and positive to the end.

When the Cunningham manuscripts are published they will be dedicated to Jan in recognition of her volunteering efforts and contribution to science education.

We extend our sympathy to her husband Doug and son Reuben.

CALM sweeps up awards

PICTURED below is principal health and safety officer Tom Wood, accepting one of the 116 Awards for Eminence in Safety presented to CALM by Minister for Labour Relations Graham Kierath at this year's IFAP/GIO Australia Safeway Awards.

The Awards of Eminence went to 116 CALM work groups, with 87 of these also receiving awards for achieving six months without losing a day from work because of a work-caused injury.

This year, CALM achieved the highest number of successful work groups out of 600 groups

from 57 Western Australian organisations that entered the award scheme.

In a letter congratulating the successful groups, Executive Director Dr Syd Shea said:

"CALM has entered every year since the inception of the awards in 1979. We have enjoyed a successful return for our efforts.

"This year, CALM qualified as the number one organisation in WA with the highest number of successful groups.

"I would like to congratulate the personnel for having taken part in this award scheme.

"By ensuring a safe

working environment and that the best practices are pursued, it has made possible our most successful year.

"I look forward to your participation when the next Safeway Award begins in November 1994."

The Safeway concept is unusual among schemes throughout Australia in that there is no limit to the size of the group taking

Many small groups in CALM took advantage of this, successfully completing their nominated target. The target categories

were:
1. Award for Eminence
in Safety Award which is

made to those organisations and units where commitment to safety can be measured by the introduction of observable systems, procedures and training.

2. The Lost Time Injury Performance Category that (a) requires the group to achieve six successive calendar months without an employee being away from work because of a work-caused injury, necessitating absence from work for one full day, or shift, or more or

(b) requires the group to nominate and achieve a percentage reduction in the recorded lost time injury rate over the six nominated calendar months.



South Coast Region networks the networkers



Geraldton Networks Conference - Fitzgerald Bioshere Reserve Presenters: Angela Sanders, John Watson, Nathan McQuoid, Bill Lullfitz. Photo by Sue Patrick

A DIRECT result of networking - at a conference on networking - is that two research projects, one on ants and the other on bees, are being proposed for Fitzgerald River National Park (FRNP).

The aim of the Geraldton Networking Conference was to explore

by Verna Costello

the role of networks at the local, regional, national and international level.

Making a major presentation at the Conference was a contingent from the South Coast Region, comprising regional manager John Watson, biosphere ecologist Angela Sanders, founder member of the Fitzgerald Biosphere Project, Bill Lullfitz, and FRNP ranger-in-charge Nathan McQuoid.

They spoke on the role of the Fitzgerald River National Park Biosphere Reserve in biological and community networks.

Several conference participants commented that making the presentations as a group was a fine example of the high level of co-operation between the various parties involved in the Fitzgerald Biosphere Reserve Project.

A group of five South



Bookmark Biosphere Reserve Visitors from South Australia: Pamela Parker, Bruce Lambie, Stephanie Williams, Cythia Thiele, Mike Harper. Photo by John Watson

Australian visitors, who had attended the workshop and field tours held at FRNP, reported below, also attended the Geraldton Networks Conference.

They were from the Bookmark Biosphere Reserve, an area comprising Danggali Conservation Park, the former Calperum Pastoral Station, and other reserves on the Murray River system near Renmark.

The visitors were: Danggali Conservation Park manager Mike Harper, Calperum Pastoral Station manager Bruce Lambie, author of UNESCO/ANCA 1993 review of Australia's Biosphere Reserves Pamela Parker. Travelling with the South Australians were two women from the Chicago Zoological Society in the USA, Stephanie Williams, a researcher into malleefowl, and Cynthia Thiele, a volunteer working at various locations in Bookmark.

Workshop recommends promoting biosphere



Fitzgerald Biosphere Reserve Field Tours above: Sepulcralis Hill, Fitzgerald River National Park.

Photo by John Watson

ONE of the recommendations resulting from a recent one-day workshop and two field tours was that more community education and promotion about biosphere reserves be undertaken.

The workshop and field tours were held to address a range of issues affecting Fitzgerald River National Park Biosphere Reserve.

Organised by CALM ecologist Angela Sanders, the workshop and field tours were part of her Fitzgerald Biosphere Project, funded by the Australian Nature Conservation Agency (ANCA).

About 60 people were involved, including CALM's South Coast regional manager, John Watson, Albany district

by Verna Costello

manager, Drew Griffiths, part-time interpretation officer Corinn Hine, Fitzgerald River National Park rangers Nathan McQuoid, Lindsay Brown and Mark True, - and several members of CALM's Fitzgerald River National Park Advisory Committee.

Chairman of the WA Soil and Land Conservation Council Rex Edmondson was workshop host, and Shire councillors from Jerramungup and Ravensthorpe Shires also attended.

The field tours were to Fitzgerald River National Park, Ravensthorpe Range, and local farms where sustainable farming practices and othe landcare activities such as retaining native bushland along creek lines are being associated out.

ing carried out.

A large part of the workshop was devoted to developing recommendations for future management of the vegetated buffer zone and agricultural areas surrounding Fitzgerald River National Park.

The workshop also included presentations on the history of the biosphere reserve, landcare issues, malleefowl preservation activities, examples of Shire support, and a special schools display mounted by Fitzgerald and Jerdacuttup Primary Schools and Ravensthorpe District High School.

How is your health?

FOOD alone cannot make you healthy, but good eating habits can play a major role.

Good health also depends on lifestyle, personality traits, mental health and attitudes.

To ensure an adequate intake of all the nutrients important for a healthy life, your eating plan should include a wide variety of foods.

Unfortunately, although there is a huge selection of foods available in Australia, most people do not choose the right foods.

This guide is to help

by Linda Gilbert

you choose foods that will give you all the energy and nutrients you need for good health.

It will also help you to avoid eating too much of the sorts of food that can push up your blood cholesterol, weight and your risk of heart disease.

Enjoy a wide variety of foods - Meals will be tastier and you can take advantage of in-season specials.

Keep to a healthy weight - Keep an eye on your waistline; loose or tight clothing is a good indication of a change of weight.

Eat fewer fatty foods - Trim excess fat off meat and remove skin from poultry; look for low or reduced fat alternatives.

Eat more bread, cereals, vegetables, fruit and legumes - These foods contain fibre which help to fill you up and keep you regular.

High-fibre foods are usually good sources of vitamins and minerals.

Go easy on high salt foods - Check the labels and choose brands containing no added salt, low salt, or reduced salt.

Go easy on alcohol -If you enjoy a drink, stick to one or two a day, and keep them small; when eating out, keep a jug of water at the table - and space your alcoholic drinks.

This is not just a diet to be given up after a few weeks, it is a sensible, lifelong way of eating for allround health.

It provides a variety so you can enjoy your food and, therefore, keep in shape with healthy eating and regular physical activity.



Point Ann Whale Watching Platform, Fitzgerald River National Park
Photo by John Watson



Artist Neil Carter works on a painting for Geikie Gorge Information Centre. Photo by Allen Grosse

Geikie display

ARTWORK for a new visitor information centre at Geikie Gorge National Park is being prepared by local Aboriginal artist Neil Carter.

Neil was initially employed on contract by CALM. He is currently employed on contract with the Darlngunaya Aboriginal Corporation.

The octagonal information centre that will house his paintings was built in 1990 by West Kimberley staff.

It was designed especially to accommodate the Kimberley wet - during floods the entire structure could be a metre underwater. It is basically a roof on a timber frame.

The movable information panels will be removed and stored during every wet season.

All the hardware for the display has been purchased and is in place and it is hoped the information panels will be ready during this visitor season.

The panels cover several themes, such as Aboriginal culture, geology and flora and fauna of the

Neil has already completed 'Working together' (reproduced in the Spring 1993 issue of LAND-SCOPE), 'Bunuba Dreaming' and several

Other paintings will include 'Devonian Sea', 'Living Limestone', and 'Gender Bender' (on the barramundi).

"An advantage of Neil's involvement is that all the artwork will be painted by one person, giving the display a uniform style," CALM West Kimberley District Manager Allen Grosse said.

The text panels were written by former CALM employee Kathy McGregor, Allen and wildlife officer Peter Trembath.

"Geikie Gorge has a wonderful cultural history, an amazing geology and a complex ecosystem, so the information centre is a great opportunity to educate people about the natural environment," Allen

"The centre will be an excellent interpretive facility that will provide an in-depth insight into these facets of the Gorge.

"It will tie in well with the two boat tours run by rangers and Aboriginal people for tourists.

Geikie Gorge is one of the major attractions of the Kimberley, with more than 25 000 visitors per year.



Joe Ross and Bruce Williams, who run the Aboriginal heritage boat tour at Geikie Gorge, with Aboriginal tourism development officer Sam Lovell. Photo by Allen Grosse

Change of Hart

DESPITE its scenic beauty and lush surroundings, running Mount Hart homestead, in the West Kimberley, is no picnic.

Just ask Taffy and Jenni Abbotts who manage the homestead, a major attraction of the proposed King Leopold Range National Park, for CALM.

Airlines

In peak tourist season, around three planeloads of people per day stop at the homestead for morning tea or lunch.

Six airlines now regularly fly in to the area.

Tourists also drive in from the Gibb River Road and usually stay overnight.

The homestead can comfortably accommodate nine people. As well as meeting,

greeting and catering for these guests (Jenni's home cooking is becoming known far and wide), Taffy spends 3-4 hours each day raking leaves, watering and mowing eight acres of lawns and caring for the garden.

There are numerous repairs to be done and the

50 km road and the airstrip need regular maintenance. To enable them to better the 50 km to their front gate, usually about a 4 hour round trip. Because it's so difficult

cater for the fly-in visitors

and regular guests, Taffy

is extending the homestead

by building an outdoor

dining room with views

structure will cater for 18

Taffy and Jenni must drive

The stone and concrete

To collect the stone,

over the Barker River.

to get away, they will only make it into town to shop every two or three months. The advantage?

"Well we sleep well at

New Kimberley loos don't flush away funds

MORE than \$30 000 was saved on the cost of a new amenities block at Mount Hart homestead.

Designed by West District Kimberley manager Allen Grosse, the wood and iron structure was made up in sections in the yard at Broome.

Three days

It was then transported to the park and assembled in only three days by Allen, CALM staff Henry Corpus and David Grosse, and homestead manager Taffy Abbotts.

The four worked until 10 pm each night and until 1 am one morning so it would be ready for a group of 30 people due to arrive at the homestead.

The result is an attractive building that provides an extra two showers and toilets for visitors.

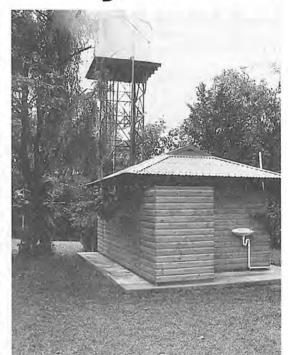
"However, it is not just a functional building. It has a sense of place and is aesthetically pleasing," Allen said.

"This is the sixth building of its kind to be put up in CALMmanaged areas in the West Kimberley.'

The others are at Silent Grove, also within the proposed King Leopold Range National Park, and Windjana Gorge National Park.

"The amenity block would have cost the department more than \$20 000 if it had been built by a contractor," Allen said.

"Instead, it cost only \$7000 - an achievement of which all the staff involved can be proud."



A new amenities block at Mt Hart homestead blends attractively into its surroundings. Photo by Carolyn Thomson



Mt Hart homestead managers Jenni and Taffy Abbotts (front) with (from left) CALM's Allen Grosse, Cameron Smith of Derby Air Service, ranger Ross McGill and Tiffany Hill, of CALM's West Kimberley office. Photo by Carolyn Thomson

School program

CALM's West Kimberley district office has produced an environmental program for primary school students

It was produced by qualified teacher and former CALM employee Katherine McGregor in consultation with staff



Ben Hill, of Cable Beach Primary School, meets a local snake species. Photo by Tiffany Hill

from Cable Beach Primary School.

"The program, funded by the Priority Country Schools Area Program, is currently being tested at Manager Allen Grosse

"It presents a series of activities in which students learn about specific plants and animals and their relationship with the Kimberley environment."

There are active outdoor learning sessions in addition to classroom activities, all aimed specifically at year six and seven students in the Kimberley

A student workbook has been produced to accompany the program.

The program will enhance appropriate attitudes and behaviour toward our natural environment

"It should also foster an awareness, appreciation and understanding of Kimberley plant and animal communities," Allen said.

"Three Kimberley communities are exam-Cable Beach Primary ined: pindan, mangroves School," CALM District and remnant rainforest communities.

"The children will be

climate and landform and their relationship to flora and fauna in each of the communities," he said. The food chain and the

encouraged to look at

human impact on the landscape are also examined. "So far we have had a

good response from the school involved," Allen

"We should be able to distribute the program to all schools in the West Kimberley by next year."

> Stories by Carolyn Thomson

School bush garden a hit at City Beach Primary

A SEED of an idea has germinated and flowered into a native bush garden at City Beach Primary School.

The City Beach Bush Garden Project Team recently joined CALM to invite 54 metropolitan pri-

by Marie McDonald

mary school teachers, who had bought the booklet Growing Local Plants for Education, to a bush garden workshop at the school.

The booklet, written by Robert Powell

CALM's metropolitan and south west land officer Christina Lake, is a guide to planning and establishing a bush garden in a school environment. The aim of the work-

project. Teachers, parents, students and local consultant Robert Powell, who have made and continue to make the project a reality, gave an interesting account of the background of their project.

shop was to provide the

teachers and CALM staff

with the opportunity to see

a bush garden in a school

setting and to listen to,

and talk with people be-

hind the City Beach

This was followed by a guided tour of the bush garden led by highly enthusiastic students, all members of the Bush Guardians Club at City Beach Primary School.

It was obvious that the children took great pride in their garden and their knowledge of the plant species and ecology of the garden was impressive.

The bush garden project is used across the school curricula for science projects, mathematical problem solving, creative writing, and media studies, to name only a few.

A video featuring the students explaining the establishment of their bush garden has been produced.

The school has won Greening Australia and Landcare awards for their projects.

Growing Local Plants for Education costs \$5 and is available from CALM's headquarters at 50 Hayman Road, Como. Phone (09)



Left to right, A pupil from City Beach Primary School, right, shows Mundaring forest officer Jamie Ridley and Dwellingup forest officer Grant Lamb around the bush garden. Photo by Fiona Marr

She made Rod's day

A PLEASANT surprise awaited Perth District reserves officer Rod Martyn, above, while fox baiting recently at Twin Swamps Nature Reserve near Bullsbrook.

Rod and Agricultural Protection Board officer Fred Ramsden were driving through the reserve. placing baits when Rod spotted a rare western swamp tortoise ambling through the grass.

A much-excited Rod leapt out of the vehicle in great haste and grabbed the tortoise.

The western swamp tortoise has not been seen on the reserve in recent years and was thought to be extinct, or in very small numbers, in the area.

A vermin-proof fence around the 5 km boundary

was completed recently in preparation for the first release of captive-bred tortoises, probably some time in September.

Rod was the technical and supervising officer responsible for the overall fence construction pro-

He said capturing the tortoise was a highlight of his involvement in the project.

"The wild population, which provides the genetic pool for captive-bred tortoises, is very small, so each new animal found increases the chances of the species' survival by adding to the available gene pool," Rod said.

Rod's find - an adult female - was a bonus, as there are only about 15 known adult females in existence.

The tortoise was ultrasound scanned by Dr Gerald Kuchling of the University of Western Australia, and was found to have developing eggs.

Equipped with a miniature radio transmitter, she has been released back into Twin Swamps Nature

Radio tracking later in the year will, it is hoped, locate and allow the first ever nest in the reserve to be studied.

The construction of the vermin-proof fence and release of the captive-bred tortoises at the reserve form part of a ten-year recovery plan for the species that CALM and the Western Swamp Tortoise Recovery Team is implementing.

Volunteer spotters wanted

THE weather is probably the most frequently discussed topic on planet earth - and, for all we know - on any other planet.

Now, you can put some of your 'weather talk' to more productive use by directing it to the Western Australian Bureau of Meteorology, which recently established a voluntary severe thunderstorm spotter

being used to improve the Bureau's knowledge and forecasting of these violent storms throughout

A severe thunderstorm produces phenomena such

- tornadoes (sometimes known as 'cock-eyed Bobs')
- · damaging winds
- · large hail stones · flash flooding.

Records since 1960 The information is indicate there are at least

15 days every year when severe thunderstorms Western Australia.

Because damage is generally very localised, or away from buildings or other structures, and not all events are reported, the actual number of severe storms may be much greater than the Bureau

Severe thunderstorms occur in the south-west coastal strip from Lancelin to Walpole during the cooler months, and throughout the State, but mainly in inland southern areas, during the warmer Reports take less than

the first task being to phone the Bureau's toll-free number: 008 802 135. For further information

five minutes to carry out,

about the network, please phone Tony Bannister or Kevin Smith on (09) 263

Dugong survey finds their numbers have stabilised

A RECENT aerial survey has indicated that the population of 10 000 dugongs at Shark Bay is stable.

The two-week survey of marine animals in the Shark Bay and Ningaloo Marine Parks and Exmouth Gulf was carried out by CALM and the James Cook University in Townsville.

"The results are yet to be analysed on computer, but observations indicated similar numbers to the last survey five years ago,"

CALM district manager Ron Shepherd said.

"Shark Bay has the largest and most secure populations in the world and it is important that CALM, which manages the area, monitors numbers to ensure it remains that way."

Ron said the survey showed interesting variations in the distribution of dugongs in Shark Bay compared with that in

"The largest congregawere found on seagrass meadows offshore from Francois Peron National Park and along the eastern shores of Dirk Hartog Island," he said.

"The survey team believes the distribution of the dugongs reflects water temperature patterns in the Bay and this hypothesis is being investigated with Landsat imagery.

"Dugongs live in warm water and, during winter months, may be actively searching for warm water brought into the Bay by the Leeuwin Current."

Over two days, more than 15 humpback whales and 50 manta rays were also counted in the Bay between Bernier and Dorre Islands Nature Reserves and the Carnarvon coast-

"Numerous shoals of bait fish, similar to those seen at the Cape Cuvier feeding frenzy last year were observed in these waters," Ron said.

"It is possible that the manta rays and whales were in the area feeding on these shoals."

Ground parrot find

NEW sightings of endangered ground parrots have caused great excitement among wildlife enthusiasts and CALM scientists.

Ground parrots are found in south-eastern and south-western Australia. The western subspecies is endangered, with only a few hundred birds in the

The ground parrot once occurred west of Albany, but recent WA records have all come from long unburnt heaths in Fitzgerald River National Park and the eastern side of

by Allan Burbidge

Cape Arid National Park.

Last autumn, however, local naturalist Ray Garstone saw what may have been a ground parrot at Bettys Beach, near Two Peoples Bay.

Then, in June, Alan Danks and Leigh Whisson saw a ground parrot in the Cheyne Beach area while they were carrying out census work for the noisy scrub-bird project.

These records are the first from west

Fitzgerald River National Park for more than a decade, and give new hope for the recovery of the species.

In March this year Mike Paxman, ranger at Cape Arid National Park, saw a ground parrot in heathland north-west of Yokinup Bay - the first record from the western side of the park.

The area of the park previously known to be occupied was very small, presumably supports very few birds, and is highly susceptible to loss by