

Official newspaper of the Department of Conservation and Land Management

RECENT criticism of CALM over false claims made by environmental groups and some members of the tourism industry that the Department proposes to halve the karri stream, river and road reserve system must be defended.

The Department has made a number of recommendations in a review of the system - entitled The Road, River and Stream Zone System in the Southern Forest of Western Australia - which has been submitted to the Environmental Protection Authority.

The EPA are reviewing the proposal and will submit a recommendation on whether to accept the proposal or not to the Minister for Conservation and Land Mangement, Barry Hodge.

CALM's submission proposes a redistribution of road, river and stream zones to imrpove the conservation of flora, fauna and the hydrology of the southern forest.

SW zone system — the facts

This proposal is based on extensive scientific research undertaken since the reserve system was introduced more than 15 years ago.

The research indicated that conservation and hydrological values would be better protected if the zones were reallocated to favour streams.

Under our proposal the total area of the new system will be the same as the existing one.

An additional consideration for CALM was how to maintain contractual arrangements with the timber industry following the State Government's decision to reserve the Shannon Basin as a national park.

As the existing road zone system is twice the width required by EPA - that

By SYD SHEA

is, twice the width required by law it was suggested that the deficit in timber supplies could be made up by clearfelling the road reserves to 200m on either side of the roads.

This suggestion was rejected. There will be no clearfelling.

Following a careful evaluaton of all timber resources during the preparation of the Timber Strategy it is now proposed to selectively cut some of the outer areas of some of the road and river reserve system, that is in some areas within the zone that are furthest from some roads.

Rather than detracting from the forest the proposal is expected to benefit the

forest in a number of ways.

In particular is the added protection of stream zones where the best examples of forest can be found and where fauna is most abundant and diverse.

The thinning of the road reserves will improve the growth of the forest within the reserves while the regeneration of those areas selectively cut will provide a multi-tiered forest in both age and size that will provide nesting hollows for both birds and mammals as the older trees die.

Water quality will be maintained while increased protection of streams will reduce sedimentation.

The aesthetic values of the forest will be maintained and in some cases improved by the use of landscaping prin-

ciples in the forest along roadways.

The river and stream zones were established because they were known to be areas of high biological diversity as well as to protect watercourses.

CALM's recommendation will enhance and expand this protection.

Road zones were established to maintain a vista for travellers of undisturbed forest . . . this will be maintained and in some places improved.

Environmentalist claims that these buffer zones will be clearfelled are not supported in CALM's proposal.

Claims that the forest will be clearfelled to provide timber to be chipped is also wrong.

It should be remembered that under the terms of the Department's Regional Management Plans and Timber Strategy about 50 per cent of the karri forest is now either in national parks, nature reserves or in an area zoned with a priority for conservation and recreation.



Barry Hodge with Badgingarra students.

Minister presents environmental award

DESERT BURNING

HEAVY cyclonic rains in the North-Eastern Goldfields and adjacent parts of the Gibson Desert prevented the first aerial prescribed burning experiments getting underway in May in the Gibson Desert Nature Reserve.

The semi-trailer carrying fuel from Wiluna for the Department's "Islander" aircraft and vehicles became bogged up to the tray at Wongawol Station 350km short of its destination.

Further rain a few days later made matters worse, leading to the postponement of the project until September.

The Department has set up a task force to carry out the experimental burning and associated research.

Andrew Burbidge and Phil Fuller (Woodvale) arrived at the reserve first (before the rain) to set up quadrats and count birds before the burning commenced.

Next to arrive was David Pearson from Kalgoorlie Research, who will study vegetation regeneration, closely followed by Ian Kealley, Mike Tagliaferri, Dave McMillan and Andrew Chapman from Goldfields Region.

They upgraded two old airstrips in the area; both had been constructed by oil exploration companies several years ago.

The Kalgoorlie contingent had to travel via the Laverton-Warburton road and an old track northwards past Alexander Spring to avoid closed roads around

that dalgytes (or Rabbiteared Bandicoots) still occur in the nature reserve.

Fhil Fuller and Andrew Burbidge found burrows and diggings on one of their bird quadrats and Per and Graeme set traps, which caught a female dalgyte with pouch young.

This was the highlight of the trip.

The animal's distribution, like many other medium

sized marsupials has declined drastically since colonisation and it is now restricted to a few relict populations in the arid interior.

The dalgyte, which we named Leanne, was captured in a box trap set inside

a fresh burrow. Leanne was fitted with a radio transmitter and released amid a barrage of flashlight and cameras on Saturday night.

On future trips it is hoped to capture and radio track further animals to study the effect of fire on their movements and behaviour.

Phil and Andrew collected useful pre fire bird data for proposed burn sites as well as control quadrats that will not be burnt.

They found a number of species breeding following good rains that fell a month

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MORE than 80 CALM staff attended a two-day seminar at Bunbury on March 31 and June 1 to familiarise themselves with the Timber Strategy.

The three forest regions and their districts were represented as was Crawley, specialist branches from Como and the Wheatbelt and South Coast regions.

The seminar was organised and run by John Clarke and Des Donnelly of the Forest Resources Branch under the direction of Divisional Manager Don Keene.

tract every week this year. The seminar was broken into four sessions over the two days, the first dealing with the overall timber situation including supply, demand, inventory and silviculture.

The main speakers for this session were George Malajczuk from the Economics Branch, Hugh Campbell (Inventory) and Jack Bradshaw (Sil-

viculture). The second session dealt

Alan Walker, Don Spriggins and George Peet, and Principal Research Scientist Graeme Siemon.

The third and fourth sessions held on the second day covered the implementation of the Management Plans and Timber Strategy at Regional and District levels and included such areas as staff demands and Regional, Branch and Forest Resource Branch responsibilities.

The main speakers on these topics were Don with resource allocation to Keene, John Sclater, John

STUDENTS from Badgingarra Primary School near Geraldton who operate a tree nursery have won a national environmental award.

Calm Minister Barry Hodge presented the \$500 World Environment Day Youth Award to Year 7 student Cherith Nelson, who accepted it on behalf of her fellow students, at a function at Matilda Bay to mark World Environment Day, on Friday, June

(World Environment Day was celebrated on Sunday, June 5.)

The students started the nursery at the school in 1981 in response to a need by farmers and others in the community who wanted to plant native trees.

Seeds of trees local to the area were donated by CALM.

The nursery has produced more than 60,000 trees which are sold by the students on an annual "tree day", on which 20,000 trees were sold this year.

The project is self-financing and has raised more than \$20,000 towards school excursions.

The nursery has wide community support and has been backed-up by CALM Extension Officer Roger Edmiston.

Mr Hodge said the success of the nursery illustrated that everyone, no matter how young or old, can be involved in environmental protection.

"There are some lessons for us all in their achievements," he said.

"It is important that we all take an active role in doing something positive for our environment."

Five World Environment Day Youth Awards are presented around Australia to young people who have contributed to improving our environment.

As part of the celebrations at Matilda Bay the Kelmscott Senior High School band and the Brentwood Primary School choir entertained invited guests.

Billy tea and damper were also served.

Wiluna.

Neil Burrows and Karan Maisey (Woodvale), Per Christensen, Graeme Liddlelow, Bruce Ward and Alex (Manjimup Robinson Research) drove via Meekatharra and Wiluna and arrived with red-brown vehicles instead of the orginal white ones.

Neil, Karan, Bruce and Alex are studying fire behaviour and fuel dynamics in desert spinifex grasslands, while Per and Graeme are working on vertebrate animals.

All was now ready for the plane crew of Sue Folks (pilot), Gerard van Didden and Bob Selkirk to arrive — all, that is, except the fuel.

Notwithstanding the delay, the researchers were able to collect some valuable data.

One piece of good news is

The seminar was opened by the Executive Director, Dr Shea, who stressed that the Regional Management Plans and Timber Strategy were a first attempt to revitalise the timber industry and to improve the public's knowledge of this important industry.

Dr Shea said CALM had received a positive reaction to its plans from the timber industry, evident in the more than \$1 billion investment plans proposed for the south-west.

He said the positive reaction was also reflected in the signing of new contracts with sawmillers.

The Forest Resources Branch had finalised at least one new timber supply con-

industry.

Clarke, Jon Murch, Jim Adams, John Smart and Al-The speakers were Don lan Hill. Keene, Regional Managers

... on a lighter note

Seminars usually produce their lighter moments, and this one was no exception.

John Clarke's presentation seemed to have more relevance to the implementation of CALM's EEO and sexual harassment strategy than the timber strategy.

Regional Manager Alan Walker adopted the guise of small sawmiller "Jack Sleeper" to make some pointed comments from an outside organisation.

Regional Manager Don Spriggins presented a CALM structural model based on what looked like a flagon of wine, a funnel filter and an empty vessel.

On a final note, at the formal dinner the restaurant announced there would be no bread because it was all eaten at lunch time. On hearing this, Roger Underwood criticised the foresters present for breaking their fundamental principle: they had, he said, exceeded the lunch time permissible intake which had lead to a collapse of the restaurant's sustainable yield strategy.

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FROM MY DESK

News was released by the Minister for Conservation and Land Management, Barry Hodge on June 10 1988, of a study by a Government Committee into the prospects of paper pulp factory to be established in the south-west.

A detailed feasibility study is being conducted by the WA Chip and Pulp Co which arises from a requirement of the Woodchipping Agreement Act that they should regularly investigate the prospect of a pulp industry in Western Australia and should advise Government of the results of such a study.

There are many questions to be asked and answered in this regard, and an interdepartmental committee chaired by CALM's Executive Director, Dr Shea, will be doing just this over the next few months.

These questions include:

• How big should a pulp mill be made?

• Which species should it use?

 Will there be enough Blue Gum pulpwood available in later years to supplement the availability of local species?

• Where should the factory be located?

 How much water, electricity, gas, etc, will be required and where will it come

from? Will exports of woodchips to Japan be maintained?

• How many jobs will be created? • What will be the role of various government agencies such as Westrail, SECWA, WAWA, TIDA, and CALM? The decision about proceeding with the project will be made by WACAP as a result of their feasibility study, and by Government as a result of the interdepartmental working group.

By IAN HERFORD ARE you thinking of studying for a higher degree (perhaps a Masters or PhD) but not sure of what to do?

The choice seems endless with environmental science, MBA, specialist PhDs, economics etc. all relevant to of land area the management.

The MSc -in Natural Resource Management run by the University of WA may be the answer you've been looking for.

The following extract from the University handbook describes the overall aim of the course:-

"The aim of the course is to complement students' ex-

Post graduate course

isting disciplinary skills with training in the principles of efficient resource management and the evaluation of policies in the public interest.

"Emphasis in the course is on: (a) social and economic objectives for the management of natural resources and the natural environment in the interest of society; (b) the theory, concepts and principles of efficient resource management; and (c) a conceptual appreciation of the ways in which elements of natural resource systems interact and an understanding of the

likely consequences of manipulating these systems".

Natural resources covered in the degree include fisheries, minerals, agricultural land, forests, water and conservation lands all of which are relevant to CALM.

These resources are examined in both their scientific and their social and economic contexts in order to derive optimal management strategies.

The course is offered both full time and part time, taking a minimum of 12 months and two years respectively to complete. The formal coursework comprising lectures and case studies accounts for the first

two-thirds of the study year for a full-time student planning to complete the course in the minimum period (12 months, approximately March to February inclusive) and who is not required to complete additional prescribed

coursework. The final third of the year is for the completion of the thesis, which may be commenced at any time.

In order to stay in touch the with "real world" require-

ments in the field of natural resourse management, the School of Agriculture who run the degree course receive advice from a "Policy Advisory Council" composed of members of organisations operating in the field of natural resource management.

CALM NEWS

The degree programme has an intake of new students every two years, 1989 being an intake year.

Anyone interested in finding out more about the course should contact Dr Rob Fraser of the School of Agriculture at UWA.

*lan Herford, who is a graduate of the course, is CALM's representative on Policy Advisory Council.

FIRST-HAND EXPERIENCE By CHRIS HAYNES did down the Murchison

I have written before about the values of managers and policy makers doing as much Department. sampling of the Company's (or the Department's) products as

possible. Unfortunately, much of my knowledge of CALM's products comes indirectly, from such things as visits to Shire Councils and community groups, from individu-

als who are "feeding back"

their feelings about what

has happened to them in interactions with the

I am glad to say that while sometimes this feedback comes in the form of complaints, it is often very positive and shows off the very best that we can offer.

One thing that I have meant to do since coming to WA is some walking in the back country of some of our parks.

The back country is used by only a small proportion of the "open space consumers" of the State.

Most visitors are usually found within a few hundred metres of their cars and bush walking is one of those activities that is more often talked about than actually

walk a small number of us

Gorge in Kalbarri National Park during early May.

After being briefed by Ranger-in-Charge, Roy Harris, at Kalbarri, we set off from Hawk's Head and hiked about 25km down the Gorge to the popular and well known Z Bend.

We were lucky with our timing.

The river was flowing at quite a pleasant height, having being charged by water from the rains which fell in the Meekatharra area the week or so before Easter.

We were a few days ahead of the very heavy recent rains which would have made our trip a washout, to say the least. The scenery of the Gorges is quite spectacular and made all the more pleasant by a feeling of remoteness from signs of

civilisation, one of the attributes we look for in "wilderness", a concept which has been discussed frequently during the last 20 or so years in Australia.

Perhaps the greatest value of all for the trip, for me, though, was that the most important decision I had to make was which rock I was going to step on next.

With decisions of that magnitude you just have to unwind.

Not that the walking was easy by any means, and an unfortunate end to the story for me is minor fractures in both legs after a fall. I hope that since I was off duty this will not detract

done. Doubtless, I too will dine out on the stories of the

PETER HEWETT **Director of Forests**

STAFF NE

Academic

Dave Pearson, Research Scientist, Kalgoorlie, has completed his Graduate Diploma in Aboriginal Studies (S.A. College of Advanced Education).

Appointments

Paul Albone, as Technical Officer, Planning Branch: Pamela Macnish, Officer, Manjimup and Barbara Kennington, Officer, Narrogin joined the permanent staff. Russell Smith, from A P B, is a new Forest Ranger (Fire Protection), Bunbury.

Promotions

Peter Kimber has been appointed Principal Operations Officer, Como and Tony Start, Regional Manager, Pilbara, has transferred to the position of Principal Research Scientist, Woodvale. Rob Hopkins was promoted to District Forester (Admin) Manjimup; Mark Goodman to Financial Systems al Park.

Officer, Como; Ian Abbott, to Principal Research Scientist, Como; Mary Colreavy to Policy Adviser, Crawley, and Glyn Hughes to Overseer, Woodvale.

Transfers

Walter Montanus, Forester (Admin), Dwellingup to Busselton; Penni Hewett, ADFO, Wanneroo to Manjimup (Research); Mat Warnock, Wildlife Officer, Murdoch House to Geraldton; Neil Burrows, Senior Research Scientist, Manjimup to Woodvale; Jeff Bennett, Forest Ranger, Kirup to Walpole; Terry Goodlich, Ranger, Yanchep to Walpole-Nornalup; Dan Grace, Technical Officer, Kalgoorlie to Two People's Bay (as Nature Reserves Assistant); Brett Humble, Forester, Katanning to Harvey.

Retirements

Ron Davis, Ranger, retired after nearly 19 years' service at Yanchep Nation-

Canteen couple call it a day

By TONY HOLDEN

ALL good things must come to an end they say, and this month sees the retirement of the canteen operators at Como, Bill and Lotte Karow.

The couple have operated the canteen at CALM's State Headquarters at Como for the past six and a half years.

Before that they catered for the lunch time needs of the Forests Department from their nearby deil on the Canning Highway.

Bill and Lottee said they have enjoyed their time at CALM but feel that at 65. it's time to go.

They hope to spend their retirement relaxing, gardening, and looking after their home - far away from the madding crowd of lunch orders and sandwich fillings.

Lotte has particularly fond memories of

her work in the canteen. "I enjoyed serving the people most because they always laughed and joked with me," she said.

The couple emigrated from Germany in 1952.

"We would like to say thank you to all the staff for their support and wish them all the best," Bill said.

CALM storeman and longtime friend Brian Murphy will be one who will be sorry to see the couple retire.

"They've always worked hard - even at weekends - and have given staff good quality food and service over the years," he said.

The new canteen operator is Ms Frances Henneker, who has most recently operated similar facilities at the Seaview Golf Club. She started on May 30.



Canteen customers get a smile from Bill and Lottee Karow.

from my safety record. Of course I would hate to impose a blemish on the safety record of the Greenough Region.



PLANNING Officer, Peter Sandell and Technical Officer, Paul Albone, have joined the Planning at team Murdoch Branch, House.

Peter, comes to CALM from the Northern Territory with a background in the management of arid lands. He is a forester by profession and has spent the last 12 years with the Conservation Commission, based mainly in Alice Springs.

While in Alice Springs, Peter was involved in the evaluation of the species under dryland conditions, the development of effluentirrigated fuelwood plantations, rural extension, and amenity general horticulture.

Later he joined the Planning Project of the Commission and was responsible for planning at Klugs Canyon and in the MacDonnell Ranges.

equip him for his new task derstanding of some of the of developing the Manageland management issues ment Plan for Hamersley facing the Department, and will help in my current po-Range National Park. Peter has also had some sition. Park roads closed Following recent inspections both by air and on the ground it has now been confirmed that extensive road damage has occurred throughout most of the central and eastern sections of the Fitzgerald River National Park due to the recent exceptionally heavy rains. In addition, Culham Inlet near Hopetoun has risen dramatically and deep water lies across Southern Ocean West Road at the main park entrance near East Mt Barren.

overseas experience working for short periods in Saudi Arabia (on revegetation of Saudi National Parks) and in Pakistan (range management in Sind Province).

He found these two Moslem countries to be dry in more ways than one.

Paul, as a Technical Officer, will help prepare Management plans of nature reserves and National Parks across the State.

His work includes collection of various data, writing sections of the plans and aiding in their distribution.

Paul, qualified in biology from Curtin University, was previously employed by CALM on a two-year contract with Narrogin Research to study the causes of Wandoo decline in the Upper Great Southern.

Paul said: "The Wandoo study was very interesting, the results of which should be published in 1989.

"Working in nature reserves across the wheat-This experience should belt has given me a good un-

Marine Park Manager appointed

NINGALOO Marine Park is a long way away from the English industrial city of Birmingham.

But that's the path the life of CALM's Ningaloo Marine Park Manager, Sue Osbourne, has taken.

For a young lady who rarely saw the ocean as a schoolgirl, the incessant murmur of the Indian Ocean as it rolls over Ningaloo Reef will be a constant companion when she takes up residence in Cape Range National Park in the near future.

Sue's fascination with the sea and all the things under it - was kindled when she worked as a cook in a field study centre at Pembrokeshire in south-west Wales.

She later graduated from Exeter University in England as a zoologist, and learnt to dive among the kelp beds and wrecked ships around the Isles of Scilly off the toe of Cornwall. Sue undertook postgraduate studies

on Heron Island off Queensland in 1979, but what was to have been a three and a half year stay has been extended indefinitely, first by a job offer with ANPWS as a marine park manager in the Capricorna section of the Great Barrier Reef Marine Park, and later as an Interpretation Officer with ANPWS in Canberra.

Her appointment with CALM heralds her return to the tropics, a change in climate and surroundings as contrasting as the Snowy Mountains and Cape Range.

But now she will have both reef and range at her doorstep.

Sue sees her job at North West Cape as a challenge.

"I hope that during the next two to three years I can contribute to the establishment and development of what is possibly one of Australia's most valuable parks," she said.

Sue's first priority is to get the bi-

centennial funded Milvering Information Centre up and running.

She said that while the display at the centre had been designed to function on its own, she is hoping that local people from Exmouth will assist in manning the centre for several hours each day.

Similar volunteer arrangements have been successful elsewhere because not only do park visitors get personal attention, but the local community becomes involved in Park management.

"With local interest, the Milyering Centre will provide for more than a display, it will become a centre for educational and artistic activities within the Park." Sue said.

Sue said she wanted to encourage people both those working for CALM and from the general public to comment on the draft management plan for Ningaloo Marine Park.



Several sections of Hamersley Drive to the east of East Mt Barren have been completely washed away. As a result it is likely that Hamersley Drive will remain closed to vehicles for several months.

General damage has also occurred along Pabelup Drive in the western section of the park near Jerramungup.

The main west entrance to the park from Devils Creek Road remains closed due to damage caused by the Gairdener River on Devils Creek Road.

CALM and the MRD staff are assessing the damage and

it is hoped that temporary repairs can be undertaken over the next few months to enable the re-opening of Pabelup Drive and some parts of Hamersley Drive. Virtually all 4WD tracks within the park remain closed

and are likely to remain so for the winter.

CALM NEWS **Biological battle** on Thevenard Isl By RICHARD GRANT

It's been billed as the biological battle of the lightweights - that ubiquitous rodent the common House Mouse versus Forrest's Mouse. The prize: Thevenard Island, 22km north of Onslow.

Forrest's Mouse (Legadina forresti) was the only rodent occupying the island until about two years ago, when the House Mouse (Mus-musculus) suddenly appeared, probably coming ashoref from an off-shore service barge being used for seismic work or from pleasure crafts which visit the area.

Round one of the battle has gone to the intruder.

Recent surveys carried out by Pilbara Research Scientist Keith Morris indicate that the island population of the native rodent is at a low level while the House Mouse is reasonably abundant with its numbers likely to erupt into plague proportions. PLANT research material at the State Herbarium has been

ny Department's collection.

turer in Mycology.

Round two will probably determined by be September or October when Keith returns to Thevenard to carry out further research in conditions believed to be more suitable for breeding for the Forrest's Mouse.

The local rodent is believed to be a seasonal breeder, and after winter rains with its subsequent flush of vegetation and insects, Keith is hoping for a

population explosion. The House Mouse, on the other hand, has a continuous breeding cycle and can increase its numbers quickly with its shorter oestrous cycle and gestation

to the Forrest's Mouse's

period, as well as its ability to produce a litter of six or even eight young compared

or on one of the many other islands off the coast. Where Keith's initial reaction was to get rid of the

Among them is a unique range of WA fungi collected over 20 years by Roger Hilton, recently retired UWA Senior Lec-

three or four. So with resources limited and with both species competing for the same food and shelter, the local rodent successful. could become extinct on

Thevenard Island, the last known population of the species in the Pilbara. But, while Forrest's Mouse is down, it certainly

is not out. While Keith's trapping programme was to determine the extent of the distribution of the House

Mouse, and something of the biology, breeding patterns, distribution and habitat of the native rodent, he is now taking measures to ensure the Forrest's Mouse has a future in the Pilbara, be it on Thevenard

intruder, the Agriculture Protection Board hasn't been able to produce a bait that will destroy the feral

and with the House Mouse being a hardy type it was unlikely that attempts to eradicate it would be

Besides, getting sufficient numbers of Forrest's Mouse to ensure the successful reestablishment of the species might also prove difficult.

So Keith has decided to let nature run its course on Theyenard and has opted for another option: a cap-

tive breeding programme. Currently 20 Forrest's Mice are in captivity with eight animals paired at CALM's Karratha office and another six at APB research.

Keith believes that given the right conditions the mice will breed in captivity, and a small population will be able to be established on another island, probably Delambre in the Dampier Archipelago.

So depending on the success of Keith's programme, the Forrest's Mouse future in the Pilbara is looking brighter... but, is the animal Keith has been dealing with really the Forrest's Mouse? During the course of his research. Keith has concluded that the Thevenard mouse is larger than those that populate inland Australia, and the island species has affinites with the Lakeland Downs Mouse (Leggadina lakedownensis), an apparently rare species whose only know habitat is in north Queensland, near Cooktown, and in the north Kimberley.



NIC GALES and the rescued Juvenile dolphin. **DOLPHIN RESCUE**

By DOUG COUGHRAN

Have you ever had one of those weeks when you

"Both the collection and the Botany Department needed more space. These invaluable specimens can be properly curated and will continue to be accessible for researchers across Australia and overseas," explained herbarium botanist Dr Terry Macfarlane, who is Honorary Visiting Fellow and taxonomy lecturer at the UWA Botany Department.

increased by more than 10,000 specimens from the UWA Bota-

The material is on permanent loan to the herbarium.

In excahnge Dr Macfarlane will supervise the establishment of a student reference collection of Perth region plants in the Botany Department. - From UNIVIEW.

mice.

Another option, to trap and relocate the native mouse on another island, eradicate the House Mouse on Thevenard, and then re-

establish the Forrest's Mouse on Thevenard, would prove too expensive,

SPINIFIX FIRE SURVEY Sandhill Dunnart and a

The management of fire in spinifex grasslands is a perplexing question.

There is evidence that in desert areas, a gradual change to large summer wildfires over the last 60 years has contributed to the decline of many mediumsized mammals such as bandicoots and small wallabies.

A return to Aboriginal patchy burning patterns has been proposed as best for these species, but the impact of this on small mammals and reptiles remains unclear.

Consequently, a study was started in March 1987. in Queen Victoria Spring Nature Reserve to examine

the effect of fire size and seasonality on these animals.

Victoria Desert.

captures.

Twenty-three species of The study area lies near reptiles have also been the northern boundary of recorded. the reserve in sandplain Now that extensive precountry typical of the Great

fire data is available, duplicate study plots will be Pitfall and Elliot traps burnt in September and were located on several December and the response plots to assess the effect of

Mulgara.

of the mammals and reptiles early spring and summer monitored over several fires and the consequences years. of leaving spinifex unburnt. This study will provide These plots have been

managers with vital infortrapped every three months mation on the effect of fire and this has resulted in on these small animals and some very interesting so enable a more informed use of fire to suit their Nine species of small requirements. mammals have been caught

- DAVID PEARSON.

The two species have been confused in the past.

To help solve this mystery, Keith has sent liver samples to Peter Baverstock at the South Australian Museum for electrophoresis testing, and has asked Darryl Kitchener from the WA Museum to compare skeletal remains of the Thevenard mouse with those of Leggadina from other parts of Australia.

We must now await the outcome of these tests to determine whether the Theyenard mouse is a know species or a new-one.

thought you could see the light at the end of the tunnel, only to find out it was the headlight of a freight train heading straight for you.

Wildlife Protection Staff at Murdoch House had one recently.

On Tuesday, May 10, 1 received a phone call from Steve Pickersgill, the caretaker and ferry operator on Penguin Island, who said a juvenile dolphin had been found stranded by beach walkers in the south eastern shallow sandy bay on the island.

When I arrived at the Island I found a number of shivering volunteers and an unhappy 1.5m male juvenile Bottlenose Dolphin, estimated to have been four to eight weeks old and in a stressed state.

While it was unable to swim and could not be released back into the wild, marine veterinarian Nic Gales, who had been informed of the standing, believed that it was possible for the animal to recover.

dolphin was The

transported to Atlantis Marine Park to undertake emergency containment and treatment in one of the park's pools.

had the dolphin lowered to

him, and after nursing it for

about a minute released it.

noticed another dolphin just

behind Nic, and within 30

seconds of the release all the

dolphins in the area had

Five days of patrols were

completed off the Warnbro

Sound after the released,

and their was no evidence

of the juvenile dolphin

had been successful,

however, it cannot be con-

clusive without seeing a lit-

tle yellow dorsal fin (a spot

of yellow die was placed on

both sides of the dolphin's

fin before release) in the

knowledge this is the first

time such a release of a

juvenile bottlenose dolphin

Success can only be at-

tributed to prompt notifica-

tion in the first place follow-

ed by a team effort by all

If you happen to see a

pod of Bottlenose Dolphins

in the water around

Penguin Island look for that

little yellow dorsal fin, there:

are a number of people who

would like to know about it.

has been undertaken.

To the best of my

It seems that the release

vanished.

restranding.

days to come.

involved.

Observers in the boat

Atlantis' staff cared and treated the animal throughout the night and in the morning the animal was stronger and looked more likely to survive.

Following this assessment I asked Wildlife Officere Geoff Hanley and Brad Daw to locate the resident pod of dolphins in Shoalwater Bay, which they did and the pod included a number of juveniles.

Geoff and Brad noticed the pod displaying unusual behaviour near the standing site.

I decided that it was worth trying to place the stranded dolphin with this pod and telephoned Channel 7 who volunteered the use of their news helicopter to pick up the animal and Nic Gales from Yanchep and return them to Shoalwater Bay.

Nic and the dolphin were transferred to Geoff and Brad in a CALM boat when they arrived and the helicopter pilot went off to relocate the pod.

Nic went into the water,

Dear Mr Hodge,

As the Australian representative of an international cetacean organisation, I am writing to you to express my admiration for the manner in which a young dolphin was recently rescued, treated and successfully returned to sea.

It is my opinion that your department handled the rescue in a most efficient manner and should be commended for their efforts. In particular, I consider Wildlife Officer Doug Coughran deserves special mention for his kind and caring attitude towards the young dolphin, as well as his initiative in arranging for watercarft to monitor dolphin pods in the area in an attempt to locate the young dolphin's pod and return him with a minimum of discomfort. Mr Coughran's sensitive and caring approach to this situation is a credit to your department, and I trust you will pass my sentiments on to him and all other CALM personnel involved. Roy Fuller, Project Interlock -



to date, including the rare

An excursion on the first Sunday in May gave a group of senior citizens the opportunity to see an area which is part of the region's folklore.

CALM volunteers Peter Battilana, Dave Broadbent, Bob Hagan and Rangers Bruce Bond and Rick France with members of the Donnelly Hut Owners Association ferried the group from Boat Landing down the Donnelly River to the settlement and the mouth. For many within the seven boat fleet it was the first trip to the spectacular coastline. Despite the threat of rain and stormy conditions the group actively walked the beaches and explored the cliffs. Bob Hagan entertained the group by catching a range of fish. The stormy weather proved to be good conditioning because a wet, windy night could not stop the senior citizen's enjoying the spot

While most Manjimup

and the experimental techniques are carried out in this forest. residents were tucked inside warm and dry, the senior After a barbecue tea and citizens were glimpsing

plenty of hot milo and buttered raisin toast the group travelled around the forest in small buses using hand held spotlights to view the dark side of life in the forest. "The evening looked doubtful with the weather, but the wildlife was out and people enjoyed the activity. "Even getting a little wet

added to the experience."

From Page 1

Of particular interest was

the location of a Rufous-

crowned Emu-wren nest

resulted in a sighting of

seven Plumed Egrets, a bird

rarely seen south of the

Black Swans, White-faced

and Pacific Herons, Red-

necked Stints in full breed-

ing plumage, Red-capped

Plovers, Pink-eared Ducks

Also on Lake Cohen were

A visit to Lake Cohen

desert can be.

The green spinifex was

reluctant to burn under the

wet conditions, so the fire

behaviour team conducted a

vegetation survey along

Gory Highway (which runs

through the Reserve) in an

attempt to classify and

or so before the trip.

with two chicks.

Kimberley.

and Grey Teal.



ed and brush tailed a possums, tawny frogmouth owl, bush wallabies and kangaroos.

sights of the rare and en-

dangered Woylie, ring tail-

Heard, but not spotted. were many frogs welcoming the change in weather.

There were 15 enthusiastic "spotters" who rolled up on May 3.

The group travelled to Perup Study Centre, east of Manjimup, and listened to a presentation on fauna conservation by CALM Research staff, Ian Wheeler and Peter Skinner.

The Perup forest is a proposed nature reserve.

It contains more species of mammals than any other similar sized area in the south west.

Viable populations of at least five rare and endangered mammals exist at Perup.

Peter Battilana navigates his boat towards the Donnelly River mouth accompanied by four senior citizens.

Australia. DE

west.

poorly accessible reserves.

The Gibson Desert Na-

ture Reserve project is the

Department's first significant

habitat management under-

taking outside the south

shown that the disappear-

ance of almost all the criti-

cal weight range (35g to

Earlier research has

5500g mean adult body weight) mammals from the deserts is due to a significant degree to changed fire regimes after the Aborigines left the country for European settlements.

As this trip shows, working in remote areas has its problems.

However, it also has its rewards. Only time will tell how rewarding this project will be.

* This article was prepared by Andrew Burbidge and Neil Burrows.

However, a visit to the much larger Lake Gruszka was disappointing - it was sociation. completely dry, showing how patchy rainfall in the

complexes on the basis of landform and species as-

In conjunction with David Pearson's work with thematic mapping using remote sensing, we will be able to produce reliable fuel (and vegetation) maps for the Reserve.

It is also possible that we will be able to determine fuel moisture content (hence flammability and map fire

DESERT

BURN describe the various fuel

patterns using remote sensing techniques. These are vital aids to fire management in remote and

Mt Frankland National Park Page 4

A NEW national park comprising some of the State's finest virgin karri forest has been named Mt Frankland National Park.

Conservation and Land Management Minister, Barry Hodge, said the name was decided after consultation with local communities in the area.

Mt Frankland is the dominant of several peaks in the new national park.

Mr Hodge said the new park links

to the Shannon River National Park in the west and extends almost to the Kent River in the east, an area of about 32,100ha.

He said the park comprises prime virgin forest, inlcuding an area of several thousand hectares known as the Wattle forest which is considered the best virgin karri in the south-west.

There were virtually no roads in the new park making it one of the State's true forest wilderness areas. Special biological features include

the rare Rates Tingle tree and native stands of Red Flowering Gum. Bird and animal life are prolific.

Scenic features include Mt Frankland, Granite Peaks, Mt Roe, Mt Johnson and Mt Mitchell, and a rarely seen waterfall near the Mitchell Crossing on the Frankland River.

Mr Hodge said Mt Frankland National Park, together with the nearby Shannon, d'Entreacasteaux and Walpole-Nornalup parks, provided WA with one of the finest forest reserve systems in the country.

Funds for Tree By JOHN BARTLE CALM has recently received a \$1.12 nillion grant under the Federal Govern-nent's National Afforestation Programme. million grant under the Federal Government's National Afforestation Programme.

The programme was setup to foster large scale tree planting to achieve both rehabilitation and production objectives on Australian farms.

The grant will be used for a three-year project designed to improve the technical, basis of the hardwood sharefarming scheme which was recently established by CALM, and to stimulate the scheme's expansion.

The hardwood sharefarming scheme applies the successful sharefarming formula to commercially valuable eucalypts which

also have potential for rehabilitation of water quality problems.

These problems include salinity in water supply catthe and chments phosphorus pollution of wetlands and estuaries.

The eucalypts with commercial value include E. globulus, the Tasmanian bluegum.

These species have rapid early growth (up to about 10 years) but then suffer a check in growth and become prone to drought death.

They had, therefore, been discounted as suitable for rehabilitation plantings. However, recent research project. has shown that their

rehabilitation value during rapid growth is good. As young trees they also

produce high quality wood pulp currently in strong demand on world markets.

As a short-rotation crop they could serve a valuable role in our agricultural systems in the wetter (greater than 600mm rainfall)

Agriculture and the Water Authority of W.A. are partners with CALM in this

The six staff positions for the project have recently been advertised.

A SITE along the **Ouairading-Bruce Rock**

MUIR HIGHWAY Mui MT.FRANKLAND NATIONAL PARK SHANNON -FRANKLAND NATIONAL PARK WALPOLE-NORNALUP NAT PARK WALPOI HIGHWAY Scale 10 30 km

Reprieve for rare

tempt to preserve their floral emblem, has agreed to undertake a trial summer watering programme, and has made a site available within the townsite to plant seedings.

THE first five park rangers trained to join CALM under its new traineeship scheme have been appointed.

Their traineeship period is for two years and in that time they will study for the Certificate in National Park Management while gaining practical work experience in different parks.

At the completion of their course the trainees will be eligible to become permanent park rangers.

The traineeship scheme is a recent CALM initiative designed to provide a sound grounding for future park rangers and to reinforce the standard of personnel entering the National Park work force.

Signifying another milestone for the Department, one of the trainees. Ms Anne Greig, is set to become the first female National Park ranger in WA.

Anne, who last worked as a horticulturist, and is about to complete a diploma of horticulture, will begin her traineeship at John Forrest.

The other four trainees and their starting locations are - Michael Paxman, Cape le Grande; Geoff Passmore and Mark True, Torndirrup; and Arvid Hogstrom, Yanchep. areas of the south-west. The National Afforestation project will establish two large 'demonstration farms' and about 50 plots of 10ha distributed across the south west.

These will be used to explore ways in which tree farming can be meshed-in with conventional agriculture, to determine the on-farm productivity and economics of combined tree/conventional farming and to measure the water quality benefits.

The plots will be used as the focus for a major publicity campaign.

The Department of

road has been replanted with the rare and endangered Banksia cuneata.

The site is one of only six known locations where the plant grows, and there were probably less than 400 plants surviving in the wild before this project was undertaken.

The plant, which forms a magnificent display along the roadside when in flower in October, has been adopted as the Quairading Shire Council's emblem.

The history of the project goes back to early in 1987 when the Roadside Conser-

banksia

By PENNY HUSSEY

vation Committee became concerned with the Ouairading site when many of the plants died of old age and others were being choked by weeds.

The RCC discussed the best method to rehabilitate the site with CALM, which is responsible for protecting rare flora, The Main Roads Department, in which the site is vested, and the Shire.

It was decided to commission Dr Byron Lamont from Curtin University's School of Biology to study the regeneration requirements of this population.

With Banksia cuneata needing fire for regeneration, Dr Lamont planned to burn a quarter of the stand and monitor what occurs.

In May last year 16 plants were burnt, resulting in more than 800 seedlings germinating along the roadside.

Unfortunately all but seven or eight died during summer, leaving Dr Lamont believing that a wet summer is needed for seedling establishment.

As part of the study of seed viability, Curtin University germinated 800 seedlings which were cared for at CALM's Narrogin nursery.

On Monday, May 30, they were replanted by an army of volunteers from

group with Regional,

Specialist Branch, and Plan-

ning Branch representation

to formally consider CALM

land management planning

* Review CALM policy

matters.

CALM, Curtin University, MRD, RCC, the Shire and other interested local people who wanted to see this rare plant saved.

Six hundred and sixty seedings were planted along the roadside, the other 140 were planted at another location on Arbor Day.

Quairading Shire which is enthusiastic about this at-

ment plan for it. The cooperation and enthusiasm that has been shown for this project demonstrates the concern for the preservation of rare

community. Earthwatch

SOME people will go to 111 any lengths to get on tele-

Keith Sclater, Pemberton District Manager, for instance, was recently interviewed a quarter of the way up Gloucester Tree, for the **ABC** television programme Earthwatch.

vision.

The Melbourne-based Earthwatch crew spent a week in WA hosted by CALM, to produce a half hour programme on forest management and wildilfe research. It went to air on Friday, June 24.

Alan Walker, Regional Manager, was interviewed for the major story on regeneration and multiple use of the karri forest.

Filming started at the crack of dawn with Grant Wardell-Johnson retrieving mist-netted birds and explaining the research on rehabitation of regenerating areas.

CALM research scientists have studied the genetic resources of the plant and are developing a manage-

plants that exists in the

Neil Thomas, Technical Officer from Woodvale, handled the numbat interview with confidence and humour, and may well have found a new talent.

Unfortunately, the long Earthwatch running programme, designed especially for 10-14 year olds, has been axed by the ABC.

For the last 18 months it was headed by Dr David Smith, a zoologist, whose goal has been to present balanced and scientifically based information to the younger audience.

By agreement with the ABC, CALM gets joint access to the recent programme and the Ministry for Education is interested in packaging a video and offering it to schools. The programme also included a story of the eutrophication of the Peel Harvey Estuary and the bluegum project, and on rehabilitation after bauxite mining. Video copies will be provided to CALM district offices when available. -Kevin Goss.

COLLECTING

GRANTS

CHINESE FORESTERS FIRE STUDY TOUR burning techniques and fire The tour programme was

A GROUP of Chinese Foresters visited forests in the South West from May 15 to 21. It was the first time a Chinese Forestry mission had visited the State.

The group's primary interest was to inspect fire management systems.

The Chinese officials were very impressed with their West Australian experience in fire management and control as well as the very professional nature of forest management in W.A.

A very large forest fire in China's Hellongjiang province (formerly known as Manchuria) last year destroyed more than 850,000ha of pine, oak and birch forest as well as several villages and encroached into Russia.

developed by the Commonwealth Primary Industries and Energy Department in co-operation with CALM and other Australian Forest Services and the Chinese Forestry Ministry in Beijing.

CALM's Fire Protection Manager John Smart and Technical Services Divisional Manager Frank McKinnell led the party of four foresters and an interpreter.

Following a briefing in Como the group were flown to Manjimup where they spent two days inspecting fire towers, aerial detection methods, aerial prescribed

P

fighting equipment.

They also took the opportunity to view the CALM nursery at West Manjimup and the regeneration programme.

Later in the week the group visited Nannup and were introduced to logging operations, fuel reduction and management in pine forests, log storage and salvage from fire affected pine. In Bunbury the group

were shown the Wesfi plant and sawmill and then inspected the Wood Utilisation Research Centre at Harvey with Graeme Siemon.

The Chinese mission members were Feng Bingren, Forest Fire Management Office, Ministry of Forestry Beijing, Divisional Operations Chief and Logging salvage, engineer Lang Wei, Research Fellow Xiao Ganguru and Engineer Lu Ming-Han.

The interpreter and project co-ordinator was Mrs. Gao Tang from the Chinese Department of Foreign Affairs.

Mr Smart said despite difficulties with technical language interpretation the group derived great benefit from the trip.

But all was not lost.

Many people were killed in the fire.

Ironically, the forestry delegation's fact finding mission was planned before the fire to study modern prescribed burning and fire control measures.

After the fire, the recovery of fire killed timber became one of the important objectives of the tour since they face the prospect of recovering up to 50 million cubic metres of wood.

The mission was conducted under the Australia-China Agricultural Cooperation Agreement which promotes exchanges as a reciprocal basis between the two countries over a wide spectrum of agriculture, forestry and fisheries.

AT a one-day workshop held on May 10 and attended by Regional and Branch managers and

staff, as well as some members of the Policy Directorate, Planning Branch's future directions were considered.

The workshop was chaired by the Director of National Parks, Chris

Haynes, and the first morning session consisted of a series of information briefings. Bob Chandler and Ken Wallace presented the regional demands for planning Branch's services while Jim Williamson and Paul Frewer outlined the existing system and planning functions of the Planning Branch.

Sue Moore followed with

BRANCH WORKSHOP ANNING * Form a small working

options for future plan preparation.

> The second session in the morning ised a brainstorming technique to identify the major issues associated with planning and management plan preparation.

Four syndicates were then formed and each one put its own priority to the issues already identified.

The major issues of the fifty-two put forward were to do with: the planning system; regional plans versus area plans; format of plans; planning priorities; public participation; finance to implement plans; monitoring; implementation and review; and planning in the absence of management plans.

After lunch each of the four syndicates discussed possible solutions to a different issue - the planning system; format of plans; implementation of plans; and planning priorities.

The findings of the workshop are being written up for distribution to participants and others interested in planning in CALM.

The workshop formed an excellent basis for improving our interaction with regions about planning matters and as a result of it, Planning will: Branch

* Meet more regularly with regions to discuss planning matters.

* Prepare a review of the planning process from current literatire in W.A., Australia and overseas. * Prepare a strategic plan for Planning Branch.

Woylies at Perup Nature Reserve and numbats in Boyagin Nature Reserve were very photogenic in the hand, but tested the camera man's reflexes as they darted back into the forest upon

