



CALM News

Official newspaper of the Department of Conservation and Land Management

COMO RESOURCE CENTRE
DEPARTMENT OF CONSERVATION
& LAND MANAGEMENT
WESTERN AUSTRALIA

VOL 3 No 28 June 1987



CALM's Director Nature Conservation Barry Wilson (right) and Marine Park Manager Greg Pobar (left) discuss a park display with Barry Hodge.

Kings Park of the ocean

WA's first marine park opens

MARMION Marine Park — described as "the Kings Park of the ocean" — was officially opened by Conservation and Land Management Minister Barry Hodge on May 22.

The park encompasses 10,500 ha of coastal waters and foreshore lands from Trigg Island to Burns Beach, and stretches five km offshore.

By proclaiming the marine park, the first in WA, a unique piece of metropolitan coastal waters and foreshore was being preserved for future generations.

"It has not been an easy project but I'm certain it will be worthwhile and that it will be appreciated by all Western Australians," Mr Hodge said.

"The key to the success of this marine park is its management and, of course, public support and cooperation."

Mr Hodge said a management plan for the park was being finalised by CALM.

It was a complex task but was essential to the preservation of the park for enjoyment by all West Australians.

"The solution we will

come up with will not please all the supporters of all the competing uses.

"Probably there will be criticism that they have been treated too lightly.

"It is necessarily a compromise.

"What is happening here is that recognition has been given to the legitimate value of all the competing uses of the area and ways are being sought to maximise each use without infringing on the others.

"We are striving for a balance between the provision for different uses that represent the mix of the needs and aspirations of the whole community.

"There is a single yardstick which can be applied, and that is the total benefit of the community. Compromise involves give and take.

"The number and range of competing uses taken account of in the management plan for this park will mark it as a very significant success.

"A success that will become a model for future developments."

Mr Hodge said that as well as becoming a premier tourist and recreational attraction, the park would be a valuable resource, an unparalleled research laboratory and a major conservation area.

The management plan would preserve marine flora and fauna and their habitats, and put considerable emphasis on public access and recreation.

Recreational fishing, spearfishing, scuba diving, public amenities, recreational activities and education were among the areas covered.

As well marine sanctuary areas would be declared and marked for passive recreation.

A "Friends of Marmion Park" group was also being formed, led by North Metropolitan Province MLC Graham Edwards.

CONFERENCE STUDIES MAMMALS

By TONY FRIEND

SCIENTISTS studying mammals in all parts of Australia came together at Karri Valley Lodge, near Pemberton, recently for the 33rd Scientific Meeting of the Australian Mammal Society.

This annual conference, which had not been held in WA for 13 years, was organised by several local members of the society.

It ran from May 12 to 15 and had an attendance of 28 from the eastern states and 58 from WA including a strong CALM contingent, several of whom

presented results of their recent research.

Andrew Burbidge and Norm McKenzie (Woodvale) outlined "The conservation implications of patterns in the recent decline of WA's mammal fauna".

Jack Kinnear (Woodvale) presented the results

CALM staff key speakers

of his research on "The Red Fox: a major threat to the conservation of Australian mammals".

Norm McKenzie (Woodvale) and Tony Start (Karratha) gave a paper entitled "Structure of insectivorous bat guilds in Pilbara mangroves".

In a theme session on mammals of offshore islands, Tony Friend (Woodvale) spoke on "The Western Barred Bandicoot on Dorre Island, WA" and Keith Morris (Karratha) on "Rodents of the Dampier Archipelago".

A second theme session concerned mammal data bases and atlases around Australia.

Between sessions, a mid-conference tour of regenerating karri forest around Pemberton was led by Graeme Liddelow (Manningup) and Per Christensen (Como).

After the conference, 37 of the registrants were taken on a two-day tour to those outstanding conservation areas, the Perup and Dryandra Forests conducted by Garry Inions (Manningup) and Tony Friend (Woodvale).

With the help of Neil Thomas and Bruce Turner (Woodvale) Garry and Tony amazed the visiting scientists by producing so many rare mammals — woylies, numbats, and both brush-tailed and red-tailed phascogales (wambengers).

The conference was a valuable and educational experience for mammalogists from both sides of the continent, and it is to be hoped that another 13 years don't pass before the next meeting is held in the west.

OILY SOLUTION

CALM is responsible for WA's islands and marine parks and the animals and plants that inhabit them.

These face destruction in the event of an oil spill and it's important that CALM managers know how to deal with such a situation.

Marmion Marine Park Manager Greg Pobar and Metropolitan Planning Officer Leon Griffiths recently attended a two-day workshop on mopping up oil spills.

The workshop was organised by the Fremantle Port Authority, the Environmental Protection Authority and the Navy.

Greg said: "CALM is involved in marine management and there have been instances already where there were nature reserves in the path or in the vicinity of an oil spill.

"The Department decided it was time we identified what equipment is available to clean up and who is responsible for certain areas so we can protect those reserves in the future."

Held on Garden Island, the workshop dealt in theory and practice.

One day was spent learning about oil, oil spills, the environment and the cleaning up process.

The second day was purely hands-on, with demonstrations of oil clean-up machines: skimmers, booms, and spray dispersants.

Greg said: "An oil spill is like a fire.

"The object is getting to it quickly before it spreads, predicting where it will go, and trying to keep it contained."

Erosion control saves pool

CROSSING Pool, one of the three major pools at Millstream in the Millstream Chichester National Park, is being restored to its normal level by sand bagging after floodwaters had scoured one of the channels flowing out of the pool.

The channel was eroded by floodwaters following heavy rain from Cyclone Connie which passed over the Pilbara earlier this year.

Subsequent normal flows had deepened the channel to a little over one metre at the outlet from the pool.

The consequent drop in the pool level made it difficult for swimmers to get out of the water, the banks

By TONY START

of the pool had started to slump and there were fears that the adjacent cajuput forest could die.

Cajuputs (northern Paperbarks) which have a shallow root system depend on water being near the surface.

The existence of erosion gullies up to 3 metres deep below Crossing Pool were first noted after the Cyclone Joan flood in 1976.

At that stage they were 300 metres down stream of the pool.

A detailed investigation showed the process to be natural and radiocarbon dates on logs in the gullies suggest that the sediments

through which the gullies were cutting have built up during the last six hundred years.

Subsequent floods have carried the gullies back until, prior to Cyclone Connie, they were less than 100 metres from the pool.

The process has been closely monitored by an interdepartmental group.

The group was established to monitor all aspects of the surface hydrology and associated animals and plants at Millstream so as to ensure that pumping of water from the Millstream equifer for Coastal town supply does not damage the environment.

US fire experts praise us

TWO visitors from the US Forest Service, here in April to look at safety programmes for fire fighters, have given CALM high praise.

In a letter to Fire Protection Branch Manager Jock Smart, Safety Training Officer Jerry Monesmith

and Programme Leader for Fire Equipment Development Art Jukkala, said:

"We arrived safely and in good condition after a very successful and rewarding trip. Our success was a result of the efforts of you and your staff which went far beyond the call of duty.

"Phil Cheney was correct in encouraging us to make the trip to Western Australia and saving the best until last.

"The complexity of the situations you deal with are apparent and assisted us in developing an appreciation for your programmes.

"Not only are your safety record and accomplishments well known and respected throughout Aus-

tralia, but they will soon be recognised throughout the United States as well . . ."

While here they were shown different fuel types in the south, the looked at the run of the Walpole-Nornalup National Park fire.

They also spent time with CALM Safety Officer Tom Wood and Denis Glennon from the Industrial Foundation for Accident Prevention, and with the Bush Fires Board.

Jock said, "They were pretty impressed with our safety programme.

"It seems over there they lack the solid commitment from management to a good safety programme."

DAVID S Woodruff, Professor of Biology at the University of California, is on Sabbatical leave at the Zoology Department, UWA.

His research focuses on genetic aspects of animal speciation, taxonomy and evolution.

He has offered to talk with interested CALM staff about global changes in environmental management.

His telephone number is 380 2236.

From my Desk

In recent months, all sorts of statistics have reported the value of tourism to Australia.

It's an intangible phenomenon — you know it's happening and yet your own part might be only to say "G'day".

If you're a park ranger, you're in the front line, but most of us do not get that direct contact.

Tourism is different from the way forest industries have traditionally worked. There we see the logs going to the mills, then to houses and furniture.

The forest industries have an assured place in the economy, and so has our looking after visitors to our lands, which is where CALM interacts with the tourism industry.

We haven't yet got a really clear idea of where all our visitors go, where they come from, and what they want. For now we have to make do with our own intuition, but late last year we started our own research programme with Luisa de Braganca at the helm (see last month's CALM News).

Already results have been useful but we are only just beginning. The results will ultimately help us with such decisions as allocation of staff, and where to put facilities.

Facilities (paths, signs, toilets) often make the difference between a visitor enjoying a place or leaving disappointed; facilities are often the key to getting new inspiration from nature or understanding the environment.

Design, location, and size are all important. Jim Sharp recently described them as our "corporate body language."

I am very proud of the extraordinary efforts of Wayne Schmidt and his team in conducting training courses for nearly 150 staff.

It's also pleasing to see that since CALM has been in business, about 200 visitor facilities of all kinds have been established.

Thanks to the many people in CALM who did these jobs well. The investments will be well repaid — not just in cash to Australia but in the simple pleasures they can give to our visitors.

Chris Haynes
Director of National Parks



Second intake trainees graduate

THE second intake of CALM trainees have graduated from the one-year Commonwealth Traineeship Programme.

Executive Director Dr Shea was on hand at the graduation ceremony to wish the 15 trainees good luck in their future jobs and present them with certificates of achievement for completing the programme.

The trainees worked in clerical and land management positions at CALM, and will go on to seek employment in other organisations.

Here, Dr Shea congratulates Jodi Mundy (right) with parents Audrey and Mervyn, and Yvonne Bakewell, (left), with parents Melvyn and Pauline

GOVERNMENT MOVES TO SET UP SHANNON NP

ACTION was taken in the State Parliament recently to create a major new National Park in the South West.

Conservation and Land Management Minister Barry Hodge introduced a notice of motion to excise 43,000 hectares of State forest from the Shannon River Basin.

The excision requires the approval of both Houses of State Parliament.

Logging in the Shannon River Basin was stopped by the State Government in 1983, and the premier, Mr Burke foreshadowed the establishment of a National Park when he launched the Timber Strategy and forest draft management plans recently.

As a national park, a substantial area of high-grade karri forest will be preserved in its natural condition for all Western Australians to enjoy.

The proposed national park is located between Manjimup and Walpole and will join the D'Entrecasteaux National Park on the south coast.

The Timber Strategy and draft management plans confirmed the intention of the Government to create major new national parks and conservation areas, while securing the future of the timber industry.

The documents clearly demonstrated this could be achieved without logging the Shannon River Basin.

Proposed

At the same time the Timber Strategy and draft management plans proposed adding more than 500,000 hectares to the conservation estate by giving it the equivalent of A-Class status.

Mr Hodge said he was confident the excision from State Forest of 43,000 ha of the Shannon River Basin would have a speedy passage through State Parliament.

"In the very near future, we will have a major new national park of karri forest of which all Western Australians will be justifiably proud," Mr Hodge said.

The base detail was produced by the Division of National Mapping from compilation supplied by the WA Department of Land Administration.

For further information, contact Mr H M Churchward, c/, CSIRO, Underwood Avenue, Floreat Park, 6104.



Pat's 21st is up

PAT COLLINS, CALM forest officer, Inventory Branch, recently celebrated her 21st — her 21st year with the Department, that is. Pat joined the Department as a laboratory assistant in Research Branch and shortly after was transferred to Manjimup to work in inventory, where she stayed until her move back to Perth in 1973.

Public discuss Yanchep NP

YANCHEP National Park management was the subject of a wide range of public suggestions at a recent meeting.

CALM Planning Officer Vanessa Smith, who is preparing the draft management plan for the Park, said representatives from the Wanneroo City Council, a local member of Parliament, everyday users of the Park and tourism, conservation and other interest groups attended the day-long workshop.

The format of the meeting was similar to that of others CALM has held, with background talks in the morning and a workshop session in the afternoon.

The workshop exercise asked participants two questions: What is Yanchep National Park going to be like in 20 years; and how would you manage such a Park.

Consensus

There was general consensus that the Park would essentially be the same but would be upgraded, and there would be an increase in people pressure.

When it came to management priorities there was no consensus, Vanessa said.

Using a shopping list approach, participants chose what they would fund with a limited amount of money.

At the top of the list

were rowboats, the swimming pool and golf course.

Vanessa said this form of public participation was being used in conjunction

FIVE 1:100,000 maps covering part of the South Coast and hinterland have recently been published for the CSIRO division of groundwater research.

They cover an area from Northcliffe easterly to Many Peaks-Breaksea and

with a visitor survey, a number of letters and other input to complete the draft management plan.

The plan is due out in September.

are identified by the standard national map names.

Information on the vegetation is referenced and further detail is contained in a manuscript to be published early this year.

Initial sample copies of the maps have been supplied to Manjimup Regional Office and to Head Office Protection Branch.

Safety starts with you

HOW do you work? Do you sit all day? On a repetitive production line? Driving? Or doing manual labour?

Whatever type of work you do, it can have a detrimental effect on your health unless you are aware of how your body responds to certain activities.

You can then take steps to correct things and prevent illness and injury.

SCHOOL A SUCCESS

CALM's annual safety school has just been completed by 87 people from throughout the Department.

Foresters, research scientists, land administrators, park rangers and wildlife officers, just to name a few, participated in the five two-day courses held in Busselton.

Safety Officer Tom Wood said: "I think the course was excellent this year, I've got a lot of feedback

Rehabilitation of physical injuries form the basis of physiotherapy.

Treatments cover such work-related injuries such as: back pain and neck pain; overuse syndromes (RSI); general sprains and strains; and muscle stress.

Effective rehabilitation and early treatment make a huge differ-

from people that attended who were really pleased with it."

The course was conducted by Ian Reid from the Industrial Foundation for Accident Prevention.

A number of new subjects were covered, including changes in occupational safety and health legislation, how to motivate employees to a better safety performance and communication techniques.

ence to recovery time with an early return to work.

Ergonomic advice on restructuring work to best suit the human body includes: work posture, workstation design, back care education, general health and fitness, task analysis and job design, exercise breaks, physical stress and relaxation and early identification of problem areas.

Awareness is the key.

Advice on seating, how to lift heavy objects and how to avoid RSI area all part of our balanced health and safety programme.

To assist in the management of back and posture problems a number of training films and videos are available from Safety Branch, Como: Bend your Knees, 16mm film and video; Understanding, Prevention and Management of RSI, video; Out of the Game, an 8 min video on posture and exercise. — TOM WOODS.

We're spreading word on plans

By COLLEEN HENRY-HALL

CALM officers have been spreading the word about the three draft forest region management plans and Timber Strategy.

Conservation and Land Management Minister Barry Hodge has extended the public review period by one month to July 17, giving the Department more time to contact people, as well as enabling more people to respond.

In the Northern, Central and Southern regions, a number of groups that

might be interested in hearing about the plans and making submissions have been contacted.

In Southern Region, 79 groups were invited to have one of 20 district and regional CALM officers talk to them about the plans.

With a resource package prepared in the region of overhead transparencies and speech notes, they have been addressing schools, shire councils, sawmillers and contractors, tourist bureaus, service clubs, interest groups and bush fire brigades.

In the Northern Region, CALM has organised a showing of the video prepared for the release of the plans to employees in Bun-

nings' Jarrahdale and Dwellingup sawmills, along with talks to local interested groups by district staff.

At Head Office, Information Branch Manager Kevin Goss, said, "We've sent out letters and glossy booklets inviting people to invite us to come and talk to them."

CALM staff from Como are giving two to three talks a week on the draft plans.

He said 4000 "What Future for Our Forest?" booklets have been sent out in response to the recent advertisement in the Sunday Times.

And 200 submissions relating to the draft plans have been received at the beginning of June.

Ranger graduates

YANCHEP National Park Ranger David Lamont recently received a Diploma in Park Management from the Riverina-Murray Institute of Higher Education in NSW.

David has been working part-time by correspondence for six years to get his diploma.

He has attended residential schools in Darwin, Alice Springs, Sydney, Wagga and Aubrey to have hands-on instruction in a number of courses.

These included recreation planning, wildlife management, communications, prehistory of Australia, land-use management and park management planning.

David said, "Everything they taught me I've been able to apply in my job.

"I hope to be able to do that job better now."

Grand Canyon appeals

BEING in the U.S. I had to take a pilgrimage to the Grand Canyon.

I had seen photographs but in no way could they prepare me for the actual moment.

Wow! It was the greatest visual shock I have experienced, not to mention the worst case of gully erosion I've ever seen.

The Grand Canyon is a national park and I was keen to see not only the geology but also how information and interpretation was provided for visitors.

It's done ingeniously with a four-

By Tammie Reid

page newspaper called "The Guide" that sells for 10 cents. A newspaper format solves many of the problems of combining a range of information for visitors of all shapes and sizes — 3 million a year at the Grand Canyon!

Ideally, the visitor would receive information through contact with park staff, but in practice most rely on a pamphlet or brochure.

The challenge is to incorporate all this so it is compact, cheap, understandable and relevant.

The newspaper format is also ingenious for the Parks Service because of its flexibility.

A diverse range of articles can be printed side by side without the person compiling it agonising too much about how to blend the information.

Alterations can be made with each issue to keep schedules of activities up to date and production costs are very low.

The newspaper is an introductory publication, directing people to specific areas where rangers, brochures and signs take over the interpretive task.

Prescribed burning....

MOORA STRATEGY IS DIFFERENT

LOW vegetation, strong winds and kilometres of unbroken ground make prescribed burning in Moora District much different from that done in the forest regions.

District Manager Kelly Gillen said large-scale block burning of CALM

estate in the northern Sandplains is not practised.

Instead, fire protection strategy is to establish 100-200m buffer strips between parallel firebreaks around nature Reserves and National Parks.

Block burning of vacant land is carried out in association with the Bush Fires Board.

"Until we really understand how frequently we can burn without doing any substantial damage to the flora and fauna, we want to leave the land unburnt for as long as possible," Kelly said.

With only five officers in the district, Moora relies heavily on the local fire brigades, and assistance from Wanneroo and metro divisions fire crews to assist with the burning programme.

The fire protection commitments of the District are outlined in the Central West Coast Fire Plan which is a mutual aid arrangement with the seven shires of the district.

Expectations of CALM'S involvement is due to little government activity in the past, Kelly said.

Carrying out the prescribed burning has been an interesting challenge for Kelly, who said the closest he'd come to a fire before becoming District Manager was a barbecue.

For his rapid and invaluable on-the-job training, he said he owes much to the experience of the National Park Rangers of the District.

In particular, Keith Hockey, Ranger in Charge at Nambung, has provided considerable support with his expertise and knowledge gained during his stay at Cervantes.

"We burn as all the other districts do, according to a fuel assessment, but that assessment is somewhat limited because we're using data that applies to other areas," Kelly said.

An amended version of the Red Book, the bible of

prescribed burning, is being compiled by Lachlan McCaw, Manjimup Research, for application in heathland vegetation.

Lachlan participated in a recent burn in the district to observe fire behaviour in heathland vegetation.

By identifying different vegetation types and attendant fire behaviour, Lachlan will provide a standard that will make burning in the region more accurate, Kelly said.

Work is also being done on quantifying the amount of ground litter for standard vegetation types so officers can accurately assess available fuels.

The special problems that face Moora District are illustrated at Watheroo National Park.

An area of 44,000ha, the Park has 150km of perimeter buffer strip between the Park and Bordering farms.

"But to actually burn this length of buffer strip would take years, so consideration of alternative approaches to meeting our management objectives need to be investigated."

"This might include having to break up the Park into smaller blocks and protect those areas that are most important," Kelly said.

STAFF MOVES

TONY RAVEN, district manager, from Mundaring to Busselton.

GAVIN BUTCHER, forest officer, from Como to Mundaring.

NOEL NANNUP, Geikie Gorge National Park to Millstream National Park.

RON CHANDLER, Millstream National Park to Geikie Gorge National Park.

LINDSAY ARMSTRONG, Forest ranger, from Harvey to Mundaring.

STEVE COLLINGS, forest ranger, from Pemberton to Mundaring.

MIKE MEINEMA, forest ranger, from Kelmescott to Walpole.

BARRY JORDAN, assistant forester, from Harvey to Albany.

IAN MCKINLEY, forest ranger, from Manjimup to Wanneroo.

KYLIE KAU, forest ranger, from Busselton to Bunbury I&P.

FRANK COLYER, assistant forester, from Manjimup to Collie.

GREG STRELEIN, forest officer, from Manjimup Research Bunbury IM&C.

KEN WHEELER, forest ranger, from Collie to Jarrahdale.

RAY FLANAGAN, forest ranger, from Wanneroo to Pemberton.

GREG VOIGHT, assistant forester, from Manjimup to Pemberton.

TODD BRITAIN, forest ranger, from Bunbury to Manjimup.

Brian Beers Retires...

Senior Forester Brian Beer, Manjimup, has retired after 18 years with the Department.

Brian is another East African ex-patriate joining the company of Peter Richmond and Jock Gilchrist, who came to the Department in the 1960's.

Born and raised in Kenya, he became a forester in 1946 after training at the Kenya Forestry School.

He started training foresters himself after that, and ultimately found himself as principal of the Forestry Training School.

Choosing to leave Kenya, Brian was offered a number of jobs throughout the world: South Africa, the United States, Canada, New Zealand and Australia.

For a number of reasons he chose this country, and found himself in Dwellingup and working with forestry cadets.

He spent two years there and was transferred to Nannup as a forester, eventually making his way to district forester via the necessary exams.

"My experience here has been great, marvellous," Brian said, naming in particular the time he spent in Nannup involved in the development of plans to regenerate the jarrah forest.

Also interesting was the work he has done with jarrah silviculture as it has evolved over the last few years with work by Chris Muller and Jack Bradshaw, he said.

Brian came to Manjimup in 1976, where he rose from district forester to senior forester, responsible for the administrative running of the district.

Brian and his wife plan to travel; they have a son in Canberra and a son in San Francisco.

GOTCHA JIM!

RANGER Jim Maher's desperate dash was in vain . . . he was tagged well short of the touchline. Jim and other Crawley staff have been competing in the Corporate Cup touch football competition at lunch times on Wednesdays.



FORESTS' TOURIST POTENTIAL

CALM officers hear it often from tourist operators and business people in the karri forest region: the timber industry will kill the tourist industry on which they depend.

CALM General Manager Roger Underwood said, "We've long realised the special value of mature karri forest, which is why so many areas have been set aside from logging."

"But we've also observed tourists seemingly enjoying themselves in regrowth forests."

So earlier this year

CALM decided to get some good solid data on just what tourists think about using regrowth forests.

A visitor survey was carried out in two even-aged karri regrowth forests — Boranup State forest near Augusta and Big Brook State forest near Pemberton.

The questionnaire was designed by Luisa de

Braganca, Recreation and Landscape Branch, and the surveys were carried out by district staff in January.

Some 369 people completed the questionnaire.

Roger said: "The results tell us firstly that most of our visitors liked the forest and secondly, that nearly all would return again."

"So if we ensure there are areas of mature forest in parks as well as regrowth in State forest, we can provide visitors with a range of pleasant forest experiences."

He added: "There is also a strong message that a lot of people want more toilets

in the bush, perhaps an indication of the growing urbanisation of Australian society!"

More data on these questions will be collected, Roger said.

Football win

COMO recorded a memorable 29-point win over the Department of Corrective Services in a football match recently.

Led by the tireless rucking effort of Adrian Mitchell, CALM controlled the game from the start.

Highlights of the match were the tight defensive unit of Trevor McGill, Steve Pasco, Phil Davies and Colin Bishop.

The midfield supremacy of Peter Ryan, Mark Dalton and Ross Bartley supplied the ball to the creative forwards Jeff "Jacko" Main, Dave Tenardi and Bob Simpson.

Final scores: CALM 11-11 v DOCS 7-6.

WA KANGAROO SURVEY

THE Australian National Parks and Wildlife Service is carrying out an aerial survey of red and grey kangaroo populations in WA over the next two months.

Scientific Advisor Nature Conservation Keiran McNamara said the 1987 survey was an important component of the State's kangaroo management programme.

Keiran said the programme aimed to maintain kangaroo populations over their natural ranges and to contain their effects on pastoral and agricultural properties.

Previous aerial surveys were carried out in WA by the CSIRO in 1981 and by the ANPWS in 1984.

The 1981 survey indicated there were about one million red kangaroos and 430,000 grey kangaroos, compared with 1984 estimates of two million and 680,000 respectively.

The increase reflected the generally good seasonal conditions between the two surveys.

Keiran said the first leg of this year's survey started in the Nullarbor in late May.

The survey team would move through the south-west to Kalbarri and Leonora.

The second leg to be carried out in late June and July would cover the rest of WA's pastoral areas north to Port Hedland.

Gnamma hole rescue

By ROB COUGHRAN

IT wasn't quite the drama of a whale stranding, but for four Red Kangaroos, it was horrifying.

I was on patrol just west of Lake Moore at Boogoodar Rocks in Dalwallinu Shire looking for hunters using roo dogs.

I had almost finished a spot check when I noticed a piece of bird netting on the western edge of the rock outcrop, so I walked over to investigate.

It was about 6.15pm and still very hot, so I stood there in the eerie dead silence overlooking the dry salt bed of Lake Moore.

I could feel something watching me. I turned to look over my shoulder and saw the heads of two Red Kangaroos glaring at me from what appeared to be the solid rock face about 40m away.

I walked over to investigate and heard the sloshing of water.

In my 10 years as a wildlife officer I have come across all sorts of predicaments where birds and animals had come to grief but none as horrifying as the fate that awaited these four Red Kangaroos.

Not just one or two, but four kangaroos had slipped into a small gnamma hole.

It was only about four feet across and there were the kangaroos standing in about five feet of water.

I could at first only see three heads, neck deep and peering out at me.

I couldn't see a fourth kangaroo that was being trampled by the others.

As I began pulling them out one by one by the wrists, the stench of the water was terrible: they must have been there for days.

They all complained bitterly, hissing and growling at me.

It was too late for the largest kangaroo.

After two attempts, I managed to get him out of the water and laid him near the hold on some dry grass but he quickly died — the shock and the time in the water was too much.

The skin was coming off his wrists as I had pulled him out.

The other three had temporary paralysis and laid there for a while.

The water had badly softened the skin on their paws but within 15 minutes they had begun to recover and one by one got to their feet and hopped away.

I made the gnamma hole safe by putting pieces of wood down the hole, leaving room for water to be taken safely.

If roo prayers are answered, I'd say their's certainly were.

Fine-tuning our seed production

CONTAINER seedling production is like a fine-tuned machine at the West Manjimup Nursery.

The "UC system" for growing container plants sees more than one million eucalypt seedlings produced each year.

More than 40 tonnes of soil, a mixture of medium coarse sand, mature sawdust and some peat, plus fertiliser components, is mechanically mixed and poured into peat pots.

The racks of filled containers go into the steam steriliser to eliminate pathogens and weeds.

The trays are then placed on a conveyor belt; the first stop is a press that indents the centre of each pot.

The trays roll a bit further and seed is deposited in each indentation.

They are then coated with vermiculite, a material that holds water and helps germination.

Following a spray with water, the trays are loaded back into the racks and taken outside to germinate.

Once germinated, they come back in for thinning, a tedious manual job done by casual workers.

With extreme care, each pot is thinned to leave only one plant, and the thinned-out plants replanted into pots that didn't germinate.

The trays of future forests then go to outside growing areas.

Conference

THE W.A. Division of the Institute of Foresters of Australia is hosting their biennial conference in Perth this year.

The conference will be held at the Parmelia Hotel from September 28 to October 2.

Don Keene, Divisional Manager of Forest Resources Branch, who is President of the W.A. Division, said the conference was last held in Perth in 1968.

"That conference was in session when the meckering earthquake struck Perth and while we can't promise another earthquake we believe proceedings will be sufficiently exciting to compensate," Don said.

The theme of the conference is forest management in Australia and paper presentations will be supplemented by workshops, poster displays, field trips and social events.

The conference is open to anyone to attend and registration is available on a daily basis as well as for the full week.

Further information can be obtained from Ric Sneeuwjagt at Como or Paul Jones at Crawley.



Wildflowers confiscated

WHEN Narrogin District Manager Ken Atkins said Wongan Hills Wildlife Officer Rob Coughran had confiscated a big haul of illegally cut wildflowers recently at Charles Gardner Nature Reserve he didn't say it was this big! Reserves Officer Rob Brazell (front of truck) and Narrogin Wildlife Officer Leon Silvester gave Rob (beside truck) and others a hand to load the wild flowers for transport to Perth where it was sold.

JARRAH FURNITURE OFF TO JAPAN

CALM Minister Barry Hodge recently congratulated Bunnings on its first shipment of jarrah garden furniture to Japan.

Mr Hodge said that while Japan was a difficult market to break into, by co-operating with the Australian Trade Commission in Japan Bunnings was able to develop a new and potentially lucrative market.

He said the export of jarrah furniture was an excellent example of the type of initiative encouraged in the draft Timber Strategy which was released for public comment by CALM in April.

The proposal was for sawmills to substantially increase the amount of hardwood used for high value products and to increase the value of exports.

Mr Hodge said that Bunnings had developed the technology to use jarrah that was previously earmarked for use in the building industry because of imperfections for export quality furniture.

He said this was a significant development at a time when the amount of harvested jarrah to be made available to sawmills was being reduced.

While the trend would be reversed early next century, especially when regrowth logs became available, the increase in the value of exports would help compensate for the decrease in the quantity of timber in the short term.

This was particularly important to ensure the long-term viability of the timber industry.

Mr Hodge said the development of a new market

was also important for increasing employment opportunities in the furniture manufacturing industry.

He said that currently more than 2000 people were employed in the furniture and other value added wood industries.

This was about 10 per cent of the total employment in the timber industry, but the figure could rise significantly if the Japanese market could be further developed.

A seminar on "Pines on Farms, An Alternative Crop for the South Coast" is to be held for Albany/Mt Barker farmers interested in diversifying their farm crop with pines, receiving a yearly annuity and earning extra money by doing plantation maintenance.

The seminar, sponsored by CALM will include talks from a number of experts within and outside the Department on the economics of growing pine on farms.

The seminar will be held June 23, from 9.30 to 3pm at Dymesbury Lodge, Chester Pass Road.



WEST Manjimup Nursery Overseer Domenico DeLuca transfers containers to jiffy pots that have just been filled with potting soil to racks before they are sterilised.

Info study

CALM gathers and uses a great deal of information in operations.

With the right information and its correct management, the Department's work can be more efficient and productive.

Operations manager Frank McKinnell is directing a study team to identify CALM's current and future information needs.

The team comprises Arthur Young consultants, Garry Trinder and Mike Howe, and Computer Branch Manager Trevor Morgan and Eric Hopkins.

They are interviewing senior and middle managers to find out their information requirements, before developing a plan to use information to support these requirements.

Arthur Young has developed software for information management, a tool for the ongoing design and future application of technology in this area, which CALM has the option to buy when the project team has completed its work.

MEDALS TO RIC

RIC ALTHUIZEN, assistant mechanical supervisor at Como, came back from the New Zealand National Disability Games with a bundle of medals.

Ric won silver medals in the 100m, 200m and 400m track events and the discus, two bronze medals in the javelin and shotput.

He said in future he'll concentrate on bettering his discus performance, and leave his track work until later in his sports career.

The five-member team from the WA Wheelchair Sports Association that went to New Zealand came home with 32 medals, Ric said.



CALM Landscape Architect Richard Hammond travels with a sign fixing kit — saw, hammer, nails, that sort of thing.

When he comes across a sign that doesn't quite get the message across, whether it's obscured by the branches of a tree or listing to one side, he fixes it in a flash.



A Fisheries Inspector from the Department of Fisheries has been assigned duties at Marmion Marine Park. John Marek will work closely with Marmion Marine Park Manager Greg Pobar in the Park.



GRAEME WILSON

4-WD CLUBS CLEANUP

By MARGARET WILKE

ON a recent Sunday in May, a massive convoy of more than 150 four-wheel drive vehicles, ranging from large Land Cruisers to small Suzukis set out to clean up our forests.

Members of the Four-Wheel Drive Association met in a city car park and split into individual clubs to pick up rubbish from favourite picnic spots in the Jarrahdale, Mundijong, Dwellingup and Wanneroo forests.

The Lightweight Club (I drive a Subaru) was assigned Leslie, but we started picking up garbage right there in the car park.

Armed with rubber gloves and leather gloves for heavy duty work the first thing was spotted was: "Oh no, a syringe!"

After a short debate about whether we should touch it, one brave woman decided it was rubbish, therefore it should be

cleaned up, and she did.

A bright sunny day and plenty of good company was enough incentive to pick up the rubbish that had been discarded by thoughtless motorists and picnickers.

At Leslie we found cool drink cans and beer

bottles and, to our amazement because we were so far from civilisation, take-away food boxes.

By the end of a long morning we decided that people must be getting cleaner — the cans we were picking up were so

rusted they fell apart.

Does anyone have a good design for a contraption that will pick up flip tops?

CALM backed the clean-up and thank the enthusiastic clubs involved.

Management plan

The management plan for nature reserves in the Shires of York and Northam have been approved.

The plan for the six nature reserves, vested in the National Parks and Nature Conservation Authority and set aside for the conservation of flora and fauna, will be implemented by CALM.

The reserves are the Clackline (458ha), Mokine (289ha), Throssell (18ha) and Meenaar (71ha) in the Shire of Northam and the St Ronans (118ha) and Wambyn (215ha) in the Shire of York.

Designed to protect and enhance the conservation values of the reserves for the benefit of all Western Australians, the management plan is designed to reverse their degraded condition.

Unsuitable and uncontrolled activities, such as timber cutting, rubbish dumping, clearing, bushfires, kangaroo shooting, horseriding and motorcycle riding had contributed to condition.

To assist the rehabilitation process, activities which could further damage the fragile environments in the nature reserves would be restricted.

Trainee stays with us

Eighteen-year-old Graeme Wilson, was a participant in CALM's recent traineeship programme, but when his trainee year was over in February, he stayed on.

Graeme is a volunteer, working at the Communications Branch, under the Volunteer Youth Programme.

He is paid unemployment benefits while he works here and looks for a full-time job.

Graeme has an avid in-

terest in electronics, so he really enjoys working at the Communications Branch wiring vehicles, installing radios and basic radio repair.

"I've always been interested in electronics, so when I got the opportunity to work up here, I thought it would be great fun," Graeme said.

"This is the first time I've worked in this sort of situation, and I find it's helped me quite a bit."

"I could be looking for a job full-time, but I like doing things, getting out and giving something a go."

The Volunteer Youth Programme was established in Perth in 1980, to assist young unemployed people to gain valuable work experience.

Participants in the programme work in an occupational area of their choice while searching for employment.

