



CALM News

Official newspaper of the Department of Conservation and Land Management

COMO RESOURCE CENTRE
DEPARTMENT OF CONSERVATION
& LAND MANAGEMENT

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POINTER FROM THE PAST

PILBARA District Forester Wally Edgecombe checks the stone sign. Picture courtesy "The West Australian".

A sign from the past . . . a piece of stone weathered by the Pilbara climate is held secure by a gum tree.

The stone was placed in the fork of a gum about 90 years ago by camel drivers wending their way through the Chichester Ranges tak-

ing supplies from Roebourne to the inland stations.

Originally there were two stones, one indicating the old camel track down the Chichester scarps and the other pointing to a new track.

The stone was so embedded that the tree grew around it.

Marine strandings highlight problems

THE recent stranding of a juvenile sperm whale at Triggs and a young bottlenose dolphin at Cottesloe highlights a problem confronting CALM's Wildlife Officers.

In both cases our Officers were not informed in time to try and save these animals.

Supervising Wildlife Officer in the Metropolitan Region Doug Coughran said the Department had contingency plans and equipment to try and save stranded animals, but success depended upon early notification and identification.

Doug said with the onset of winter storms there could be an increase in the number of marine animals coming ashore along the WA coast.

He said Wildlife Officers and Regional and District Managers in coastal areas should make the public aware of CALM's contingency plans and how to identify a stranded animal.

He said this could be done by telling the local newspaper of CALM's role in saving stranded marine animals, by placing an advertisement in the paper,

by ensuring local government authorities, veterinarians and the police know of both CALM's office and after hours telephone numbers.

ANPWS "wanted" posters on whale strandings have been reprinted and will be distributed throughout coastal districts.

The poster will have CALM contact numbers but regional, district and after hours numbers will need to be included.

They should be displayed prominently throughout coastal districts, for example at beach shops, surf shops, school nature boards, fisheries offices, police stations, etc.

The whereabouts of dead whales and dolphins should also be reported because of their value as scientific specimens.

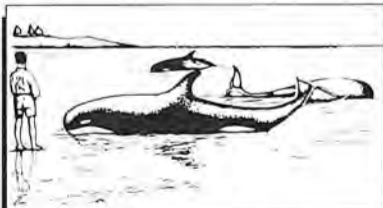
Almost all of our knowledge of smaller whales species comes from strandings.

A relief map constructed for the Cape Arid National Park information centre was returned to its maker, Geoff Wheeler, recently.

The map had been vandalised: holes punched into the styrofoam coastline, tuning "mountains" into molehills. Geoff, undaunted, is painstakingly doing repairs so that it can once again be placed in the national park to delight and inform the majority of people who appreciate what we do.

highlight problems

WANTED!



Information concerning STRANDED WHALES AND DOLPHINS Alive or Dead

RESCUE OPERATIONS RELY ON EARLY NOTIFICATION
GIVE DETAILS OF: NUMBER AND SIZE,
EXACT LOCATION and
CONDITION (ALIVE OR DEAD)

CONTACT: NEAREST WILDLIFE OFFICER
-or- DOUG COUGHRAN at MURDOCH HOUSE
Department of Conservation and Land Management
(09) 3643666

First Aid: Keep animals cool and wet, especially the tail and flippers.
Cover with wet cloth. Keep sand, water and cloth away from blowhole.

Exciting discovery . . .

HEATH RAT FOUND AT FITZGERALD

By ANDREW BURBIDGE

THE Heath Mouse or Heath Rat, presumed extinct in WA because it hadn't been seen here since 1931, has been rediscovered in the Ravensthorpe Range and the Fitzgerald River National Park.

During the ongoing fauna survey of FRNP, Ravensthorpe zoologist Andrew Chapman found some bones that had recently been disgorged by a Barn Owl.

He sent them to WA Museum expert Dr Alex Baynes, who identified some of them as belonging to the long-lost Heath Mouse.

On a later look through the Museum's collection of Southern Bush Rats, Dr Baynes noticed one that looked a little different from the rest.

On closer investigation, it turned out to be a Heath Mouse, collected by Andrew during a 1983 fauna survey of the Ravensthorpe Range.

A careful look at the rest of the Ravensthorpe collection revealed two more.

Heath Mice look much like young Bush Rats and their incorrect identification is understandable.

A few days after Dr Baynes' sleuthing, Tony Lynam, a post-graduate zoology student at UWA, and Andrew Chapman set out to FRNP to trap Dibblers for Tony's study.

Alerted by Dr Baynes' discovery, Tony took a close look at what he caught and soon found a Heath Mouse in one of the traps.

The next day Andrew caught another in a different trapline 1km away.

The Heath Mouse was first recorded in 1906 at Woyerling Wells, near Tutanning Nature Reserve east of Pingelly.

The only other known locality was near Buniche, east of Lake Grace.

In 1961, the species was discovered in southwestern Victoria, where it is a rare species.

In 1976 the EPA recommended that the Ravensthorpe Range be declared a nature reserve following its consideration of the 1974 Report of the Conservation Through Reserves Committee.

Implementation has been delayed because of the large number of mining tenements in the area.

The rediscovery shows the importance of detailed biological surveys of areas to fully document their conservation value.

The rediscovery of the Heath Mouse in the FRNP emphasises the Park's very high conservation value, and the urgent need to develop management plans to protect and enhance its conservation and recreation values.

Editor's Note: Jim Williamson of Planning Branch reports that work on the draft management plan for FRNP will begin next month.

CALM BRIEFS

It was Keystone Cops over at Murdoch House recently, Wildlife Officer Doug Coughran reports, when a Japanese film crew showed up and had CALM wildlife officers re-enacting the mobilisation of forces for the Augusta whale rescue.

Our boys in brown, Geoff Hanley, Don Noble, Matt Warnock and Doug, felt a little foolish, needless to say, as they faked high tension months after the fact.

The result will be shown to 15 million Japanese TV viewers, and Doug said he hopes such programmes will help stop the slaughter of cetaceans by the Japanese.

But he said he suspects that after their performance, the show might turn out more a comedy . . .

HAVE you borrowed a file on marri provenance trials from Alec Hart? Alec lent it to someone, but can't remember whom, and he needs the file back. Contact him on 285 at Como if you can help.

Tagged turtle in N.T.

THE first recovery of a turtle tagged by CALM officers has been recorded at Croker Island, in the Northern Territory.

The turtle, a female green, was caught by an Aborigine, who noticed the tag, recorded the details, and returned it to the ocean.

The turtle had been tagged on November 21 on Lacepede Island, north of Broome.

Research Scientist Bob Prince said the turtle travelled about 1500km to Croker Island.

"We had some Aboriginal people helping us tag these turtles, so it was interesting that it had been captured by an Aborigine too," Bob says.

Another interesting factor is that there have been two recorded captures of turtles tagged in Indonesia — one on Coburg Peninsula and the other at King Sound — which means that the WA tagged turtle has done a baseline between those two.

"That provides one of the main sources of information we're looking for because it shows an intermingling of WA and Indonesian turtles nesting," Bob said.

Bob and Research Scientist Keith Morris, based at Karratha, have been conducting a turtle tagging programme this year with funds from the ANPWS.

Bob said tagging had ended this season, but the programme would continue next year if funding was available.

From my Desk

IN previous editions of CALM News I thanked all those involved in producing the South-West Forrest Plans and the Timber Strategy.

The following letter from the Premier expresses the Government's opinion of the Department's efforts —

Dr Syd Shea
Executive Director
Department of Conservation and Land Management
50 Hayman Road COMO WA 6152

Dear Syd,

Acting on a unanimous Cabinet decision, I am pleased to convey to you, and to those associated with you in the preparation of the Draft Management Plans for the Northern, Central and Southern Forest Regions, the Government's congratulations and appreciation on a job well done.

Perhaps the best summation of your Department's excellent work covering the Land Management and Timber Strategy Plans is contained in 'The West Australian' editorial of April 18, 1987 which stated inter alia: "The scheme may not receive universal acclaim, but the Government deserves credit for devising a sensible, long-term plan to manage a unique, living asset".

While I personally endorse those sentiments, I regret that not enough has been said concerning the effort which went into the preparation of those comprehensive and historic documents. In this regard I especially acknowledge the work of everyone at the Department of Conservation and Land Management in putting forward strategies which have generally been accepted as equitable and designed to improve the management of Western Australia's forest resources.

In dealing with sensitive issues such as land and forest management, the Government is fortunate in having available the services of such an experienced, competent and dedicated team of professionals who have, through these strategies, been able successfully, to go a long way towards reconciling the competing differences of so many individuals, companies and other organisations.

I believe there can be no better vindication of the Government's decision to establish the Department of Conservation and Land Management than this master plan which gives us the kind of blueprint which is essential for sound and acceptable land and forestry planning for at least the next 50 years.

kindest regards to you all.
Yours sincerely,
Brian Burke, MLA
PREMIER

CALM'S Inspector Utilisation and Marketing, Phil Shedley, is on a four-week promotional and study tour of Europe with seven WA furniture manufacturers.

Phil said the group would visit West Germany and Italy, where they would promote high-value jarrah products manufactured in WA, and where they would study the latest technology.

The group will visit

Study tour of Europe to assess technology

world renowned furniture manufacturing centre in Milan and Friuli in northern Italy to look at sawmilling and manufacturing techniques, kilns, gluing equipment and the uses for timber residues.

Of particular interest would be the technology used to convert small logs into value-added products, especially furniture.

CALM has been developing similar technology at its Harvey

research centre to convert eucalypt regrowth logs to furniture-quality timber.

Phil said the European technology might be useful to two local timber manufacturers who had recently won

contracts from CALM for the long-term supply of small regrowth logs.

The study group also would discuss WA participation in future furniture fairs in Italy and West Germany.

On the way home, some of the party would look at the market potential for WA made furniture in Singapore.

The tour has been organised by the Guild of Furniture Manufacturers.



From (left), John Marek, Graham Edwards and Greg Pobar.

FRIENDS TOUR MARINE PARK

WHITFORDS MLC Graham Edwards got a land and sea view of Marmion Marine Park recently.

Graham and other members of the "Friends of the Marmion Park" toured its coastal boundaries and briefly explored some of its reefs with Park Manager Greg Pobar.

Mr Edwards was the main force behind the formation of the friends'

group, which he also chairs.

Greg and Nature Conservation Director Barry Wilson briefed the group on the major management concerns CALM has in the area.

These include indiscriminate spearfishing, taking of marine animals and the destruction of fragile reefs.

Here, Greg, (right) discusses management of the park with Graham Edwards, (centre) and Fisheries officers John Marek, who has recently seconded to the Department to help look after the marine park.

Barney White retires

PARTS of the original karri forest were set aside in the 1960s and 70s, made safe from the chainsaw because of their ecological importance.

The man responsible for choosing these areas in the Southern Forest Region was Barney White, then head of Manjimup Research, and most recent-

ly Metropolitan Regional Manager.

Barney recently retired from the Department.

"Those 10 years I spent in research were professionally the highlight of my life," Barney said.

"Big things were happening, woodchipping was just beginning, clearfelling of karri was being reintroduced, and the philosophy of multiple use became a practical reality.

"Selection of areas in the southern State forest to be set aside for conservation was one of the biggest responsibilities I've had."

Barney's close association with the southern karri forest throughout his career made him uniquely suited to the task.

He joined the Department after graduating from the then Australian Forestry School.

His first posting was to Shannon River where he did survey and assessment for a number of years.

"Those were days when anything east of Quin nip was unknown country and a lot of pioneering work was needed," Barney said.

He was stationed in Manjimup and the Shannon for a number of years, eventually becoming Assistant Divisional Forest Officer.

It was on to Kirup for a few years where he surveyed soil at Grimwade Plantation among other things, before being transferred to Busselton as ADFO.

Around 1958, he was appointed Divisional Forest Officer at Shannon River, where he worked until 1962.

"I loved the Shannon. It was a great place, distant enough from head office and superiors so that you saw your supervisor on rare occasions," Barney said with a chuckle.

He was DFO at Pemberton from 1962 to 1965, when he "made a change in career direction."

Barney went to work in karri silviculture research at Manjimup, and after a few years was officer in

charge, and responsible for picking out conservation areas.

"The idea of setting aside big areas of forest for conservation evolved during that time," he said.

"A group of us in the Manjimup-Pemberton area in the late 60s including Roger Underwood, Steve Quain, Don Grace, Jack Bradshaw and myself, all spent weekends and leave on the south coast.

"We loved it and wanted to guarantee its future because we knew that inevitably developments would go in there."

With their efforts D'Entrecasteaux National Park became a reality.

"The wilderness experience in those days was magnificent.

"I was fairly confident that I was the first white person to see some of that land, and later generations can't have that experience, those days are over."

Another turning point for Barney, and the former Forest Department, came in 1975 when the woodchipping industry started.

Barney said the Department came under seige from conservationists.

Then the person with the most knowledge about

silviculture, he was summoned to Perth to advise Conservator Bruce Beggs.

"It was a high-pressure, exacting period; a different world, but I was in it and did it and enjoyed what I could," he said.

The woodchipping storm "subsidised but never let up" and for Barney there was no way back to Manjimup because his former position had been filled.

He became a scientific advisor at Head Office.

With the amalgamation, Barney was appointed deputy manager in the Metropolitan Region before being promoted to manager.

"Going back to operations was a bit traumatic, but it was good to get back to the sharp end of things, get into land management on the ground, which is the guts of our job, isn't it?" he said.

Barney and his wife Jenny plan to see all the places in WA and Australia they haven't yet seen.

"I want to spend a little bit more time in the forest as a member of its ecological community, not as a manipulator, just to sit in it," Barney said.

Memories treasured

BILL RUSSELL, CALM Forester at Esperance, has retired after 37 years with the Department.

Bill started at Pemberton with the Forest Department in 1950 and worked as a gang member and storeman until 1956.

He was appointed overseer at Nannup, then transferred back to Pemberton as forest guard and ranger in 1968.

He became an assistant forester and later forester at the Cadet School in Dwellingup, where he was stationed from 1974 to 1985.

"During my 11 years at the Cadet School, more than a 150 cadets passed through, and some of these are already serving as foresters," Bill said.

"To name all the workers and staff I can remember working with would probably take up this whole edition and even then several would have slipped my memory," he said.

"But among the notables would have to be B.J. Beggs and Phil Shedley, who were camped in the same paddock in Pemberton in the fifties.

"And students Roger Underwood and Frank Batini, both of whom no doubt remember installing 18-inch culverts by hand in the Mt Folly pine plantation.

"They discovered new and original names for granite and gneiss rock in the course of this work, which strangely enough were the same adjectives they used to describe the rather large blisters on their hands."

Bill wanted to take this opportunity to thank all the people at CALM who wrote or telephoned him wishing all the best for the future.

"I'd like to return the compliment to all staff with whom I've come in contact over the last 37 years," Bill said.

FIRE WASHUP

THE Fire Protection offices at Como were silent: the 1987 fire season had come to a close and Jock Smart, Rick Sneeuwagt and others seemed to be taking a further well-deserved breather.

But, as Jock laconically observed: "It cranks up all over again in five months."

To May 2, there were 299 wildfires in lands managed by CALM that burnt an area of more than 220,000ha.

National parks were particularly hard hit, with 165,000ha burnt.

Jock said: "Except for two fires, the Hamersley Range and Walpole-Nornalup national park fires, it was a good fire season, I feel."

More than 5000ha of State forest and 1000ha of nature reserves were burnt. Other land burnt includ-

ed 39,000ha of other Crown land and 2000ha of private property.

Last season, to April 10, there had been 283 fires covering an area of about 61,000ha, including 8000ha of State forest, 430ha of national parks and 12,500ha of nature reserves.

The number of deliberately lit fires, which tops

the list of causes, is up a significant six per cent from last year, and the number of accidental fires up four per cent.

"This seems to call for public education programmes," Jock said.

Nannup District had the lowest number of fires with five; all other forest districts ran into double figures, with Mundaring the highest at 31.

FAREWELL LES

LES LUCAS, storeman at Ludlow, has retired because of bad health.

Les had been with the Department for 13 years.

He became a forest worker in 1974 at Ludlow, and contributed as a work crew member to pine establishment and tending, and forest fire fighting operations until a back injury in 1979.

After medical treatment, he resumed duties as storeman at Ludlow, until his health further deteriorated in 1986.

Les got a send-off from all his friends and co-workers at Busselton in April, where he was presented with a letter from Dr Shea thanking him for his contribution to the protection and tending of public forests.

Mike Wright Dies

MIKE Wright, 41, a cartographer in SOHQ Mapping Branch, died in a hanggliding accident recently.

Mike had been involved in work on the Southern Forest Regions Draft Management Plans, and never saw the published product of his work.

He had joined CALM in 1975 as a draftsman and in 1986 received a degree in cartography from Curtin University.

At the time he was also awarded two prizes: the DCL Surveying Instruments Prize for the best general project, and the Australian Institute of Cartographers WA Division Special Prize as the best graduating student.

Mike is survived by a wife, Jenny, and a young stepson.

A collection for them has been taken up to help

with the financial problems caused by Mike's death, and anyone interested in donating can contact Peter Bowan in Mapping.

MEET PLATO

PLATO is a sophisticated computer-based learning system resident in the UWA Cyber computer.

CALM has a telephone link into the system and research staff at Como are already doing courses in statistics, general mathematics and touch-typing.

There is room for a few more students in the tremendous range of courses available.

In addition to those above, you might be interested in computer science (FORTRAN, COBOL, PASCAL, BASIC), pure science (botany, zoology, chemistry).

If you would like a demonstration contact David Ward on Ext. 315 Tuesdays, Wednesdays and Thursdays.



Barney White



ANNE TAYLOR

BANKSIA ATLAS SURVEY COMPLETE

THE Banksia Atlas, an extensive three-year survey of Australian banksias carried out entirely by volunteers has been completed.

The results of the project, coordinated by CALM Research Scientist Anne Taylor, should be published this year by the Bureau of Flora and Fauna in Canberra.

Anne received about 13,000 recording sheets from 421 contributors providing data on the distribution of banksia species.

"Altogether, that means about 7000 recording hours, which would take one person working full-time four years to do," she said.

The banksia recording prize must go to the person who completed 1600 sheets, or the one who took six months study leave to survey the south-west of South Australia.

Anne coordinated the project from WA because two-thirds of banksia species occur in our south-west.

"We chose the banksia for our first national survey of native plants for a number of reasons," Anne said.

These include their high profile, a manageable number of species, a recent taxonomy revision, the availability of field guides,

By COLLEEN HENRY-HALL

their occurrence in every State, and their ecological and commercial importance.

Two new species were discovered.

One, as yet unnamed, was found by Wheatbelt Regional Manager Ken Wallace on a nature reserve between Arthur River and Wagin.

A new variety of Eastern States specimens were discovered.

Much of the information was gathered on the distribution of species, extending the range for many of them.

The atlas is a snapshot of the banksia distribution in Australia from 1984 to 1987, and as such, is a useful tool in charting the spread of dieback through the species.

Because it is a collection of observations and not research, the atlas identifies many questions that will need more research to find the answers.

"One very important point of the project was that it increased interest among the wider community in the environment

and the banksia," Anne said.

Case in point: A farmer who hated banksias and ripped them out wherever he found them on his land, talked with a volunteer about the project and the plants and now leaves them alone whenever possible.

Anne said: "Conservation is not just about putting fences around plants. It's important to have a well-informed, enthusiastic public, which is what the project helped provide."

Anne will next take on a wheatbelt eucalypt survey

that has received funding from ANPWS, using the same system of volunteers and CALM staff as the Banksia Atlas.

Anne spent six months designing and testing a recording kit, which included computerised data forms, field notebook and field guide.

Two years of field recording followed, which required Anne's working groups of volunteers, to the extent of giving geography and map reading lessons, she said.

She has spent the last six months analysing the results.

Beedelup Falls gets a facelift

With a \$4.5 million tourist development proposed for Karri Valley near Pemberton, there will be a great increase in visitor use of recreation sites in the area.

One site is Beedelup National Park, and in particular Beedelup Falls.

National Park Ranger Rick France said a recent upgrading project will help

reduce pressure on the area, which has a raging waterfall in winter and masses of wildflowers in the spring.

Wooden platforms and cement steps have been installed from where the trail drops down to the river below the falls and partway up the other side.

The walkway continues over the top of the falls and back to the road.

The middle section will

be completed this year after the fire season.

Most of the work was done by the Northcliffe gang late last year, and through a CEP project earlier in the year.

Ric said the improvements are mostly for safety, because the old trail wound over steep banks and came close to the edge of the falls, but the work will also preserve the fragile environment.



National Park Rangers Keith Moon, (left) and Ric France try out the new boardwalk that encircles and overlooks Beedelup Falls.

Heritage funds for walk trail

A WALK trail stretching from Cape Naturaliste to Cape Leeuwin and passing through some of WA's most impressive coastal nature spots will be completed under the Commonwealth's Bicentennial Heritage Programme.

A Heritage programme grant to CALM of \$39,500 and a further \$37,640 from CALM will pay for the project.

"There has been general community interest in establishing a walk trail, with strong support for trails to be established so visitors can more easily enjoy the spectacular views from Leeuwin-Naturaliste National Park," said Busselton District manager Dennis Hilder.

The trail will be along existing management trails and the beach and in some sections will pass near to settled areas where there is access to water and public facilities.

Camping areas will be provided at intervals of about 15km.

The trail will be accessible from all public roads which go to the coast from Caves Road, and short sub-sections of the trail will be accessible to people of all ages who don't want to do the entire walk.

Historic sites along the trail include the recently restored homestead at Ellenbrook, and the Water Wheel at Cape Leeuwin.

Some sections will be suitable for cyclists, others accessible to the disabled in wheelchairs.

Most of the funds will go toward signposting the trail, and to produce maps

and a Trail Guide brochure with complete information about the route and the main features of interest to walkers.

Dennis said he hoped

volunteers such as friends of the Leeuwin-Naturaliste National Park would become involved in helping with the trail construction and future maintenance.

Increase in Ministerials

MINISTERIALS — letters from the public seeking information, making criticisms or giving praise — can come flooding into the Department at the rate of a hundred a week.

The name comes from the fact that the letters are originally sent to the Minister for Conservation and Land Management, who in turn passes them on to the Department to investigate and if necessary prepare a draft reply letter.

Every letter is referred to the Executive Director who redirects them to the appropriate person in the Department.

Each draft letter is checked by the Executive Director before it is returned to the Minister.

A large proportion of the Ministerials received are dealt with at Matilda Bay.

Although an important facet of the democratic process, 'Ministerials' consume a large amount of Departmental time.

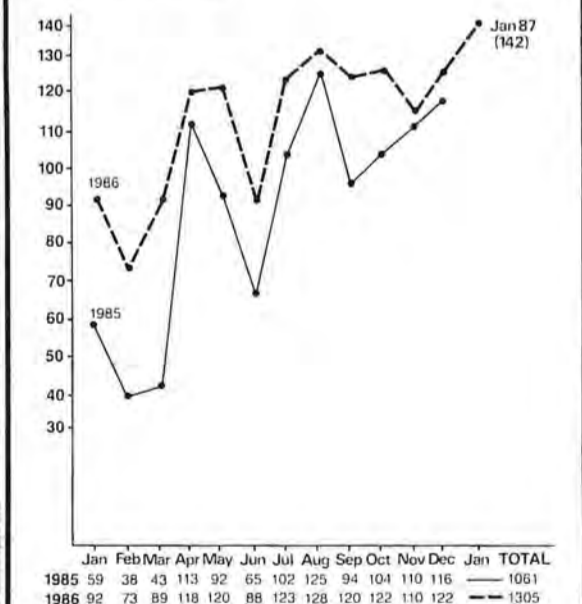
It is estimated that Ministerials and Parliamentary Questions can take up to 50 percent of senior staff time.

On average the letters are returned to the Minister's office less than a week after they have been received. 'Ministerials' cover a wide range of controversial topics.

Understandably when a person writes to a Minister he or she is usually concerned about some aspect of the Department's operations.

Consequently they are often critical.

Much less frequently complimentary letters are received — these are framed.



Ningaloo studies

STUDIES have started at Ningaloo Reef that will provide baseline information for management of the proposed Ningaloo Marine Park.

The marine park is expected to be declared in July. Marine biological consultants, Tony and Avril Ayling, from Queensland, were employed to carry out initial studies in April and early May.

They worked with CALM staff at a study site in the area for about three weeks.

Tony and Avril used methods developed over the past five years on the Great Barrier Reef where they worked as consultants to the Great Barrier Reef Marine Park Authority.

Particular attention was given to snapper, coral trout and other residential fishes which are the most popular species taken by amateur fishermen.

Permanent monitoring stations have been established to detect any changes in the composition of fish fauna and the abundance of different species which might result from increased fishing.

Baseline information will also be sought on the marine corals, particularly their growth, mortality and recruitment rates.

CALM's Director of Nature Conservation, Dr Barry Wilson, said department staff established monitoring stations at Ningaloo to measure currents, ocean temperatures and wind speeds.

Dr Wilson said this information was essential for the development of management plans and it would also be used in the future to assess the long-term effectiveness of CALM's management programme.

Seminar schedule

THE following Research Seminars are scheduled for this year:

MAY 21: Neil Burrows — Project Aquarius: Fire behaviour studies in the jarrah forest.

JUNE 18: Jim Williamson — CALM management plans: Preparation and implementation.

JULY 16: Graeme Sion — Research in timber utilisation.

AUGUST 20: Jim Goodsell — Effect of water quality on waterbird breeding and its implications for management of wetlands.

SEPTEMBER 17: John McGarth — Nutrients, water and seasonal effects on the growth of Pinus species in south-western Australia.

OCTOBER 15: Paul Brown — Wandoo decline and techniques for broad-scale re-establishment of trees in the wheatbelt.

NOVEMBER 19: Stuart Halse — Factors affecting waterfowl use of wetlands in the South-West.

DECEMBER 17: Raynor, Stirling and Inions — The karri growth model.



Louisa de Bragança

ASSESSING PUBLIC ATTITUDES

WHAT do Joe and Jane Public think of the way CALM is managing Western Australia's national parks?

It's a hard question to answer, but approached scientifically, it's possible to get information about people's attitudes toward and perceptions of what we are doing, which will in turn enable more accurate management decisions. Finding patterns of visitor use and attitudes toward conservation and land management is the job of Luisa de Bragança, who

has recently transferred from Busselton, where she was a research scientist in pine silviculture, to Landscape and Recreation Branch at Murdoch House.

Pine silviculture research and social research may seem disparate, but Luisa has had no problems making the change.

"The scientific methodology used in each is similar and I've found the change a very interesting challenge," Luisa said.

She is just finishing the first phase of the project, which includes assessing what information the Department already has on the subject by interviewing officers in each district and region.

This "information" is often the experience of national park rangers, observations and notes they have gathered over the years while working in a park.

Luisa was born in Mozambique (East Africa).

With a deep interest in nature and botany, she studied silviculture at Lisbon University in Portugal and came to WA to join her family in 1979.

Her first job, with the former Department of Fisheries and Wildlife, was drawing botanical illustrations for Research Scientist Steve Hopper, and Barbara Rye, botanist with the Department of Agriculture's Herbarium.

In 1981 she started doing research in second rotation pine silviculture at Wan-

nero, then moved to Busselton in 1985.

Luisa said: "There has been a lot of research done into the biological resource, but the way people use and perceive different lands hasn't been assessed in a scientific manner."

Luisa has been researching a number of techniques to use, including surveys and interviews, observation, traffic counts, studying photographs to analyse visitor use, entry counts for national parks and assessing the impact on vegetation.

Her own interest in computers will go a long way in establishing a data base with all this information.

A committee comprised of Jim Sharp, Sue Moore, David Ward, George Malajczuk and Ian Herford are providing advice and guidance in the development of the programme.

In Stage II, all the information will be collated and assessed.

Stage III will see a proposed visitor use information system developed based on the outcome of the first two stages.

In the final stage, the approved system will be put into use in the field with one or more districts in a pilot study to evaluate the system.

Once debugged, the system will be put into effect department-wide.

Safety program success

IN CALM's short history, it has only happened twice: we scored a zero.

Now you may think that a zero isn't any achievement at all, and in sport or life you're right, but in Safety circles, it makes us jump for joy.

In November 1986 and March 1987 no CALM staff were involved in lost-time injury accidents.

To add to the achievement, in March only nine people visited the doctor for work-related injuries.

The combined medical and lost-time accident rate is at its lowest point since 1966.

From all staff in Personnel Branch and particularly the Safety Section, congratulations on the effort of all CALM staff.

I look forward to recording more zeroes in the near future — TOM WOOD.

Big Brook shapes up as a recreation site

By COLLEEN HENRY-HALL

SOME friends did a cycle tour around Manjimup in February.

One particular day was long, hot and dusty, and midday found them at Big Brook Arboretum.

All they wanted was a swim but there was no water in sight.

Perhaps it's something in my nature, but I loved telling them when they got back that Big Brook Dam had, in fact, been just over the hill.

Big Brook Dam is not yet on many maps, so they could be forgiven for missing it.

The WA Water Authority decided in 1984 to dam Big Brook to provide water for Pemberton.

Pemberton District Manager Bog Hagan said that in 1985, CALM cleared the reservoir site and thinned the regrowth karri forest around the edge to retrieve as much timber as possible before the area was flooded.

Work on the dam began in January 1986 and finished in May.

The potential for Big Brook Dam as a recreation site was seen from the beginning.

Recreational pressure on the area was high because the Old Rainbow Trail, a scenic drive from Pemberton through the karri

forest, went through the same area the dam occupied.

"We decided to build a road around the reservoir to replace this section of the Old Rainbow Trail and develop recreational facilities at the same time," Bob said.

"With the recreation site, we can encourage people where to go and ensure its proper use."

Under the project, logging debris has been stacked and burnt, picnic areas installed and grass planted.

Future work will see car-

parks and toilets constructed, walk tracks and barbecues installed, and a lookout developed.

In addition, WAWA has agreed to allow swimming, fishing, canoeing, marooning, windsurfing and sailing on the reservoir, making the area a prime recreation spot in the southern forest.



GAVIN ELLIS surveys visitors to Big Brook Dam, asking them a number of questions, including whether they were aware the area is regrowth forest.

Interest in wood seminar

OUTSTANDING attendance at a recent wood resources seminar indicates the interest in and a need for integration of the timber industry, and improved wood utilisation.

"Western Australia's Wood Resources — Commercial Opportunities" was organised by CALM and the Forests Products Association to explore a number of issues facing the timber industry today.

Discussion focused on the amount of wood available from WA's wood production forests, the opportunities for better wood utilisation, available research resources and necessary research programmes, and strategies for developing WA's wood resources.

Speakers were from CALM, Westfield, Bunnings, Curtin and Murdoch universities, Whittakers, CSIRO and FPA.

Organising committee chairman Phil Shedley said: "One of the most impressive things was the number of people who attended the seminar."

"We had planned for between 75 and 100, and we had about 140 people show up for each of the two days."

"This indicates recognition of a problem and the need to address it, mainly how to get better value out of our wood resource."

"We're not going to lose the momentum of the conference now."

"In the next week or two a committee will meet to set up groups to investigate the suggestions that were made in the seminar."

Organising committee member and Forest Products Association Manager Cam Kneen said one of the major points was that the timber industry needs to be integrated, that the industry is not just processors and sawmills, but CALM too, and each needs to work with the other.

Phil said the conference served as an information session for the industry before the release of the Timber Strategy the following week.

Papers from the seminar will be published and distributed to participants.

Anyone else interested in receiving a copy should contact Cam Kneen, 103 Colin Street, West Perth, or on 322 2088.

REGROWTH KARRI TREATMENT TRIALS

By LACHLAN McCRAW

SEVERAL operational trials recently started by Manjimup Research staff and districts in the Southern Forest Region will help evaluate alternative treatments for young regrowth.

Results from two trials should assist managers in making the appropriate choice of a combination of thinning and burning techniques.

By about age 15 most karri stands would benefit from thinning to maximise the growth potential of the best trees and salvage the wood in stems that would otherwise die.

At the same time young stands have also reached the stage where future crop trees are taller and thick-barked enough to withstand low intensity fire.

The first trial involved prescribed burning of 40ha of 17-year-old karri forest in Gray Block, Manjimup District, with techniques developed by Fire Research staff at Manjimup.

Complicated

Several factors complicated the burn, including the unusually dry conditions, the large amount of fuel in adjacent forest and the steep terrain.

Crews from Manjimup and Nannup districts were on hand to light the fires at selected points around the perimeter of the burn and along a central track.

The condition and growth of the trees will be monitored for several years.

In a second trial, 3ha of 15-year-old regrowth forest in Warren Block, Pemberton District, were thinned.

Half the area was thinned along parallel strips; half thinned to the best 200 trees/ha, which had been marked for retention.

The Warren stand had been burnt only two years before in another trial, and so had only low quantities of fuel, which meant that the thinning debris could be burnt with little risk of damage to the retained trees.

The thinning was aided by good visibility in the re-

cently burnt stand, and allowed any trees damaged by the initial fire to be removed.

The results of this treatment will be compared with those from other trials where similar regrowth has been thinned without a prior burn.

Given the large area and variable nature of the regrowth forest, it is likely that various combinations of thinning and burning will be done in different stands.

E. Perth cemetery history written

PART of the early history of Perth can be told through the headstones of the East Perth Cemetery, and a document that makes that history lesson even more intriguing has been produced by the Royal WA Historical Society and CALM.

The three-volume journal — "East Perth Cemetery, Resting Place of Western Australian Pioneers" — is an extensive record of information from tombstones, the styles and symbolism of different monuments, the state of preservation of sites and a full history of the cemetery.

The data for the work is from a three-year survey of the cemetery by Dr James Richardson, Research Officer with the Historical Society, and National Park Ranger David "Taffy" Davies.

A presentation was held at the Alexander Library recently to hand over copies of the document to the Batty Library.

Mrs Margaret Metcalfe, head librarian of the Batty Library, was on hand to accept the documents.

