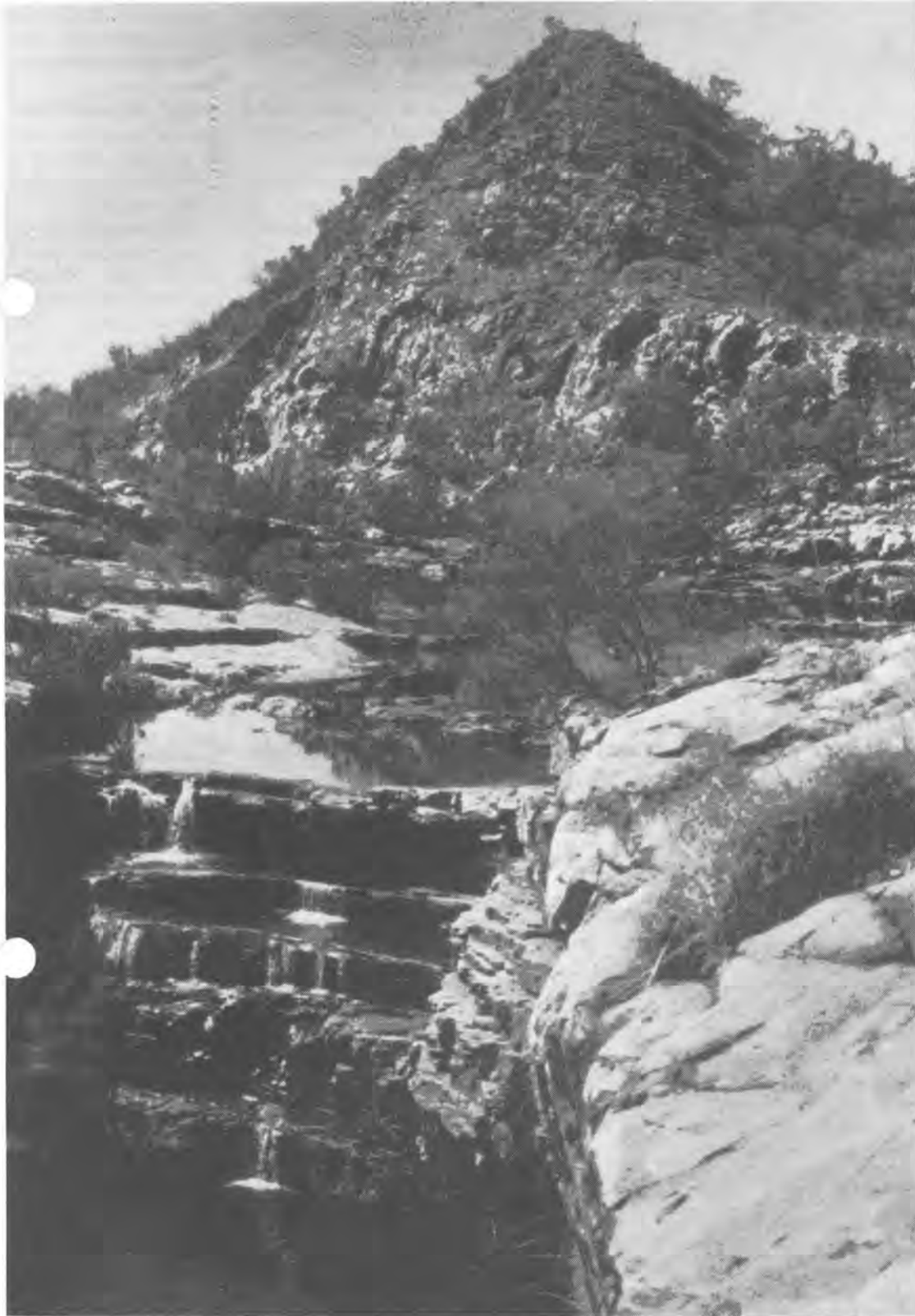


CALM NEWS

WESTERN AUSTRALIA
& LAND MANAGEMENT
DEPARTMENT OF CONSERVATION
COMO RESOURCE CENTRE

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

November 1991



Bell Creek Gorge, one of many spectacular features of the planned national park in the King Leopold Ranges.
Photo by Carolyn Thomson

Major park for Kimberley

ENVIRONMENT
Minister Bob Pearce has announced plans to create a major new national park in the King Leopold Ranges in the Kimberley, following the purchase of the Mt Hart pastoral lease.

In addition, three other significant conservation reserves will also be created.

The Minister said that the WA Government, through CALM, had acquired four very scenic and ecologically significant areas which would boost WA's total conservation estate to 15,885,000 hectares - an area more than twice the size of Tasmania.

"This is one of the most important conservation initiatives in the Kimberley for several years," Pearce said.

"CALM's purchase of the Mt Hart pastoral station, north-east of Derby, has added 370,000 hectares of land to the conservation estate.

"The station includes spectacular ranges and gorges and many rare animal species such as brindled bandicoots, rock wallabies and rock ringtails," he said.

"The sweep of the land is impressive and includes the Bell Creek Gorge, Lennard River Gorge, a number of mountains including Mounts Ord, Bell, Vincent and Broome, as well as Inglis Gap and Bold Bluff - a massive stone outcrop."

Mr Pearce said the second major acquisition was 42,500 hectares of land excised from the Brooking Springs, Fairfield and Kimberley Downs stations.

"This area includes a portion of the Devonian Reef and it is intended that a future conservation reserve would also incorporate the existing Tunnel Creek National Park," he said.

"It is an exciting proposal because the area contains portions of the Oscar and Napier Ranges, which are the limestone remnants of an ancient barrier reef.

"As well as being geologically significant, the ranges contain some of the most beautiful and striking scenery in WA.

CALM has also acquired land around Brooking Gorge, 16 Kilometres west of Fitzroy Crossing -

earmarked to become a conservation park.

Brooking Gorge is a long, narrow limestone gorge that contains permanent pools of fresh water.

The area has been excised from Brooking Springs station.

Mr Pearce said the excision also included land adjacent to the Geikie Gorge National Park - one of the most popular tourist attractions in the Kimberley.

He said this land would be added to the Geikie Gorge National Park effectively doubling its size.

"Further investigations will be undertaken to define the precise boundaries of the new conservation reserves, in consultation with pastoral and mining interests," Mr Pearce said.

"This particularly applies to the King Leopold Ranges area within Mt Hart station, and the Devonian Reef.

"CALM will also hold discussions with local Aboriginal communities regarding future management of the new areas," Mr Pearce said.

See map on page 2.

First sanctuary zones declared

THE WA Government has implemented tighter protection for Australia's largest fringing reef at Ningaloo Marine Park.

The reef's ecology will be protected in the State's first marine park sanctuary zones, and a fisheries management plan.

The joint commitment to Ningaloo was announced

last month by Environment Minister Bob Pearce and Fisheries Minister Gordon Hill.

"The reef is a vital conservation area and a prime recreational fishing holiday destination," the Ministers said.

"It is crucial that fishing and recreational activities are in keeping with the value of the region."

Ningaloo, some 1 200 km north of Perth, has a rich diversity of tropical and temperate wildlife, including the green turtle, dugong, humpback whale and whale shark.

Mr Pearce said that different use zones were an important part of the management plan approved in 1989 after four years of extensive public consultation.

"Areas have been designated for commercial, recreation and no fishing within the park," he said.

"All recreational activities consistent with protecting natural resources

are allowed in a sanctuary zone. This includes boating, though individual moorings are banned."

"This look-but-don't-touch approach conserves wildlife and the natural ecosystem, and offers improved recreational opportunities.

"Swimmers and divers, for instance, can enjoy an unexploited environment."

Eight sanctuary zones within the park have been selected and signposted along the 260 km length of marine park coast.

They will allow viewing areas to observe wildlife free from interference, protection for nesting and nursery areas, reference areas for scientific study, and replenishment of exploited species, allowing other areas to be repopulated.

Fishing rules have also been reviewed to protect future fish stocks and restrict high catch rates on key species.

Haven for wildlife

OCTOBER could have been called threatened species month.

There were State Government announcements, a seminar on threatened species conservation run by Perth Zoo to coincide with the visit of the pioneer of native wildlife sanctuaries in Australia, John Wamsley, and the announcement of a wildlife sanctuary right on our doorstep.

Seminar

The Zoo seminar featured speakers from CALM, the Zoo, WA Museum, Aboriginal Affairs Planning Authority and John Wamsley himself.

After the morning talks, participants travelled to Byford, near Armadale, where a threatened species captive breeding centre is being set up by the Zoo and

by
Tanya Maxted

CALM.

The aim of the seminar was to inform and involve the community, and to establish a network of interested individuals to be involved in future projects.

During his stay in WA, John took the opportunity to see what CALM was doing in threatened species research and management.

He visited Shark Bay and the South West, talking to several CALM staff about their work. John met Greenough Regional Manager Geoff Mercer and Shark Bay Regional Manager Ron Shepherd.

He visited Point Peti, Nanga Station, Denham, Monkey Mia, Peron Station and Hamelin Pool.

In the South West, Dr Wamsley visited Boyagin Rock to look at CALM's fox control project with CALM research scientist David Algar.

He also observed numbats at Dryandra with CALM research scientist Tony Friend.

At CALM's Manjimup office, John met scientist Per Christensen and technical officer Graeme Liddelow and visited Perup Nature Reserve.

CALM is supporting the establishment of WA's first privately owned reserve for native wildlife, which is based on the concept of John's successful sanctuary in South Australia.

The Karakamaya Sanctuary is situated on 75 hectares in Gidgegannup and will be the protected home for western brush walla-

bies, southern brown bandicoots, woylies, chuditch and other threatened fauna.

Wildlife sanctuary pioneer John Wamsley with a western brush wallaby.

Photo - Boyd Wykes





I recently visited North America and Europe to look at a range of conservation and land management issues. The benefit from these trips is not what you see there, but how it helps you put your own situation at home in perspective. It really makes you understand that Western Australia is not the centre of the universe and that we are relatively small in terms of the world scene.

I gained three major impressions from this trip. Firstly, that if we don't move quickly to capitalise on new technology that has become available to assist conservation and land management, we will be left behind. I believe we are successful in developing new technologies, but we just have to do better. For example, when I was in Canada, I visited a Canadian Federal Government Research Laboratory which was well on the way to achieving major modifications to the gene structure of prime Canadian trees.

The second impression I had was of the commitment to customer service, particularly in North America. Chris Haynes raised this point some months ago. The North Americans are superb at making people who visit their parks and tourist facilities feel welcome and will go out of their way to assist you.

My other major impression was that while the issue of 'the environment' was important in the various countries that I visited, there wasn't the degree of hysteria in the media about environmental issues compared to Australia. Although there are certainly elements of this type of philosophy, particularly in western USA, overall the impression I gained was that while environment problems were recognised, the approach was that the world environment is resilient and we can do something about it.

While CALM is constantly seeking to develop and employ new technology, has a good approach to its clients (the taxpayers of Western Australia) and is doing a number of positive things to address environmental problems, we must do better in all these areas.

This edition of CALM NEWS highlights some outstanding recent achievements, particularly in the Kimberley. We have challenges all around the State, but the Kimberley represents major challenges and opportunities. If we continue to develop our knowledge base and capitalise on new technology becoming available, if we develop a customer ethic and, above all, be positive about what we have achieved and what can be achieved, I am confident that we will capitalise on the opportunities that are available to us in this magnificent region of the State.

Dr Syd Shea, Executive Director



Story and photo by David Gough

Where did you get that hat...?

...was just one of the many questions put to Major Les Hiddens, better-known as ABC TV's Bush Tucker Man, when he visited the CALM-sponsored WOODWORKS festival at Curtin University in September.

Les gave an interesting and informative talk to an enthusiastic audience about his recent work in the production of a series of 'snack-maps' of northern WA, the Northern Territory and northern Queensland.

The maps, originally designed for the army,

carry the usual cartographic information on the front with the additional feature of descriptions and illustrations of local bush tucker on the reverse.

The maps can assist users in finding bush tucker as an aid to survival in some of the harsher parts of this vast continent.

After the talk, Les took the opportunity to tour the CALM display and sample some of the excellent bushman's tucker - billy tea and johnny cakes - prepared by Russell Adams and Caesar Cassotti from Mundaring District.

South Coast round-up

CALM's South Coast Region has had a flurry of visitors with visits by Hart Lamer Suseto, Manager of Mount Bromo National Park, Indonesia and Dr Peter Bridgewater, Director of Australian National Parks and Wildlife Service.

Hart Lamer Suseto, on a short study tour of the South West, examined coastal management issues at West Cape Howe and Torndirrup.

He also inspected path management programs at

Bluff Knoll in the Stirling Range.

Dr Bridgewater, accompanied by CALM's Director of National Parks Chris Haynes and Director of Research Andrew Burbidge, went to Two People's Bay Nature Reserve and Waychinicup National Park to see the Department's work on dieback disease and aerial canker.

Vice-regal visit

The Governor General, Bill Hayden and Mrs Hayden visited Esperance on October 3, spending most of the day at Cape Le Grand National Park.

John Winton, Phil Gray, and Ian and Eve Solomon accompanied them.

The party was treated to a brilliant display of orchids on the road to Cape Le Grand.

They visited Hellfire Bay, Thistle Cove and Lucky Bay.

The Governor-General was particularly taken with the kangaroos at Lucky Bay and noted the similarity between the eastern and the western greys.

Donation boxes

Albany District is sprouting donation boxes all over the place. Locations include: The Gap, Torndirrup; Tree-in-the-Rock, Porongurup; Bluff Knoll footpath, Stirling Range and soon there will be one at Green's Pool, William Bay.

Wayne honoured

CONGRATULATIONS to Wayne Schmidt on his appointment as a Fellow of the Australian Institute of Landscape Architects.

Wayne was appointed Manager of the Recreation and Landscape Branch in 1985 and has played a major role in developing land use planning, landscape architecture and recreation

The donation money will be used for footpath restoration and park maintenance.

There have been excellent results from the Gap path entrance to Torndirrup National Park. Information will be provided to inform visitors how their dollars will be spent.

Path management

The first annual review of the South Coast Path Management Program will take place in November. A major public awareness program is being planned in the hope of attracting more donations, sponsorships and offers of

physical help. The path management program has been attracting interest from other CALM regions and even from overseas.

Inspecting dieback photographs at Two People's Bay Nature Reserve are (from left to right): Chris Haynes, Peter Bridgewater and dieback interpreter Malcolm Grant.

Photo by John Watson



Ken's at Woodvale

THE Wildlife Research Centre at Woodvale is the temporary host to Dr Ken Johnson, a visiting wildlife research scientist from the Northern Territory Conservation Commission.

The exchange and outplacement program of the NT public service enables officers to work in relevant industry or State agencies for up to six months, and Ken will be at Woodvale from early October until the end of December.

Ken comes from Alice Springs, where he heads the wildlife unit for the southern part of the NT. His primary interests are in regional biological surveys and the conservation of endangered species. His recent work concerns the reintroduction of the mala,

or rufous hare-wallaby into the Tanami Desert.

Woodvale will provide Ken with the opportunity to learn from, and contribute his NT experience to similar projects undertaken by CALM, while having sabbatical-like leave catch up on other work.

STAFF NEWS

Appointments

Trish Nash, Information Centre Officer, Information Systems; **Stefan Kern**, Officer, Finance Branch, Como.

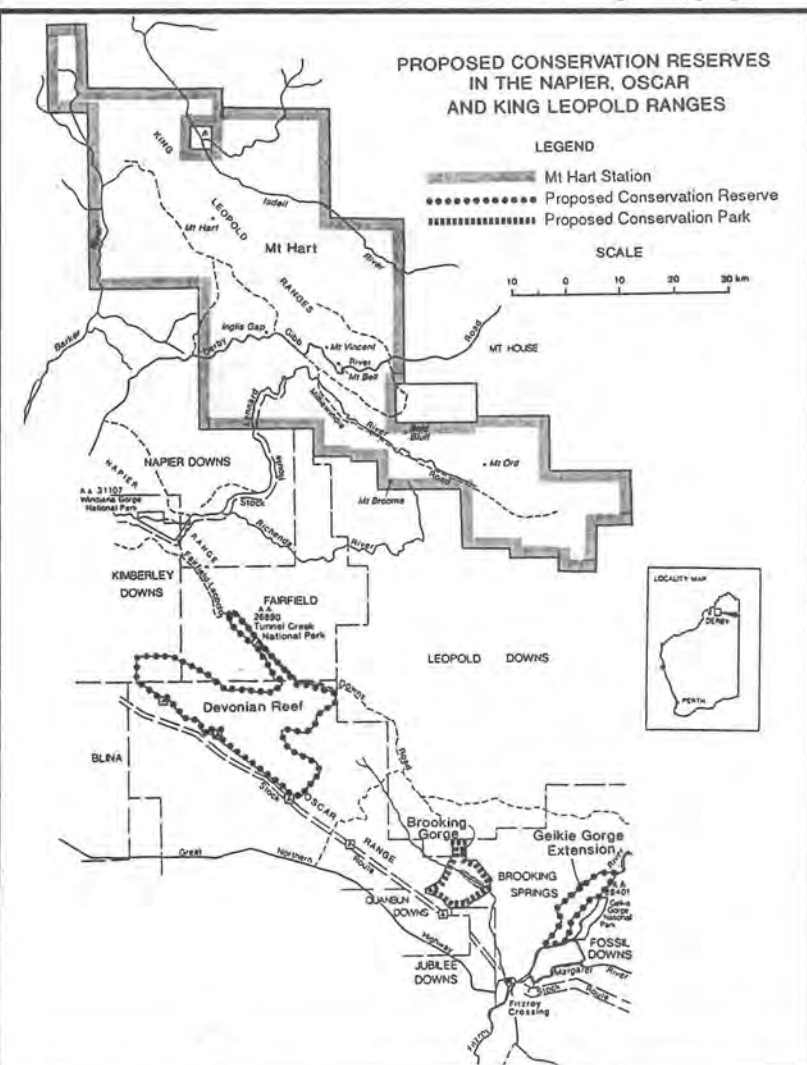
Promotions

Mike Waite to Branch Manager with Environmental Protection Authority.

Transfers

Several park ranger moves have followed an earlier call for 'expressions of interest'. They are: **Peter Morris** to Leschenault Peninsula; **Richard Pemberton**, Torndirrup; **Jason Puls**, Mobile Ranger (Esperance District); **Murray Banks** and **Bill Cuthbert**, Yanchep; **Jeff Kimpton**, D'Entrecasteaux/Shannon.

Dave Brockwell, Administrative Assistant, has transferred to the Herbarium; **Peter Wight**, Officer, to Department of Services.



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Along the Yanjidi Trail

AN EXCITED and enthusiastic group of eight adults and 16 children set off on a journey back in time down the two kilometre long Yanjidi Trail in Yanchep National Park.

They had come along to take part in the Bush Tucker Trail, just one of a series of free school holiday activities run at the park during the October school holidays.

Wildlife Officer Trevor Alley, one of CALM's Aboriginal employees, gave the group a vivid and detailed insight into the life of the Nyungar people, who inhabited the area up to 200 years ago.

Foodstuffs

The story began to unfold as the group started off along the one and a half hour trail. A recently burnt area provided a good selection of typical wild foodstuffs including; mein (*Haemodorum* sp.), djubak (*Lyperanthus migricans*), and tjuubag (*Platysace effusa*). Trevor told how Aborigines would have burned an area regularly to ensure a steady regrowth of the 'crop'.

The trail-walkers were encouraged to keep their eyes and ears open. Aborigines use keen observational skills to help them locate food and water - watching for animals such as lizards, frogs, kangaroos and turtles or other food such as emu eggs, snakes, and small birds. Not-

by
David Gough

ing the direction in which birds fly or the direction of animal tracks can also lead to sources of fresh water.

The children in the group watched Trevor demonstrate how to start a fire by rubbing two sticks together. They all had the chance to try it for themselves, but, although there was plenty of smoke, there was no fire.

Trevor explained that when a camp fire had died down a piece of hot charcoal was placed in one of the holes in a banksia nut (fruit) and carried to the next campsite by the young members of the tribe. It was their responsibility to keep the fire-stick alive. One of the children in the group was given that responsibility and, for the remainder of the walk, kept blowing gently on the charcoal - what imaginations children have!

Many of the adults in the group seemed apprehensive when Trevor began handing out bardiies (witchety grubs), but the children appeared to relish the experience of tasting these fat and juicy caterpillar-like creatures. The taste is difficult to describe but is something like a combination of egg and creamed sweetcorn - not too bad but a little chewy.

The group continued along the trail until they came upon an Aboriginal

campsite. The occupants must have made a hasty departure because they left behind a freshly baked damper and some bush honey. The food was shared among the group, who sat down to eat and listened to the didgeridoo played by Clem Yaran (brother of Bouyden Yaran from Wildlife Protection).

A gentle stroll around the end of the lake, past curious kangaroos and lolloping long-necked turtles, brought the group to the park's main office and end of their journey. The group had learned much about the past occupants of the area and the way in which they had lived.

The walk around the Yanjidi trail was just one of the free October school holiday activities held in Yanchep Park. The others included; 'Adventure Caving', a look around the wild caves of Yanchep Park with Ranger Hardy Derschow; 'Bush Friends', an opportunity to start a special relationship with nature with Technical Officer Jenni Alford of Woodvale; 'Chain Gang', an insight into human impact on the web of life with Ranger Therese Jones; 'Wildflower Garden', a stroll through the park with Graham Harris of the Wildflower Society; and 'Swamp Safari', a journey of discovery and adventure with Trainee Ranger Geoff Harnett.



The children on the Yanchep bush trail peer gingerly into the *mia mia* at the Aboriginal camp. Photo by David Gough



Things that make you go mmmmmmm... one of the adults chewing on a bardi grub. Photo by David Gough

Flora to be protected

by
Ken Atkins

TWO species of threatened flora will soon be conserved in a nature reserve in the Scott River area.

CALM is purchasing nearly 40 hectares of private bushland from two landowners to create the reserve.

The species to be protected by this reserve are the round-leaf honeysuckle (*Lambertia orbifolia*) and the Scott River darwinia (*Darwinia ferricola*).

A recent CALM survey of the Scott River National Park confirmed that neither of these plants currently occur in any conservation reserve. Both are known only from private property and road reserves.

The round-leaf honeysuckle is a bush that grows up to four metres high, with

round, glossy dark green leaves and red flowers. It is found in small numbers near Albany, but the main population is in the Scott River area.

This honey-suckle is highly susceptible to die-back disease and hence requires special site protection to conserve it.

The Scott River darwinia is restricted to this area. These plants are only about a metre high and, although related to the famous mountain bells of the Stirling Range National Park, do not have the showy bell-like flowers.

Both plants are threatened and require protective measures to ensure their conservation.

Volunteers record rare flora

HOW does CALM map 43 species of rare flora over 4 800 hectares of bushland at Wongan Hills?

This problem confronted Merredin District staff this year.

Fortunately, Ray Paynter and his fellow members of the Toodyay Naturalists' Club joined forces with Merredin District Manager Paul Brown and Reserves Officer John Carter to survey the rare flora during a long week-end in September.

Wongan Hills is internationally known for its rare flora.

It has 16 species of declared rare flora and 27 species on CALM's priority list.

Many are found only in the lateritic soils in the Hills or on the adjoining sandplain closer to the town.

There are 3 000 ha of remnant vegetation in the Wongan Hills, of which about 40 per cent is nature reserve and 60 per cent is on private property.

An additional 1 800 ha grows on sandplain soils to the east, including the Wongan Water Reserve and the Department of Agriculture's experimental

farm. The 16 volunteers were split into two groups - one to survey the Hills and the other to survey the sandplain areas.

Thirty populations (including 12 species) of rare flora were surveyed and mapped.

The sandplains group resurveyed the only known population of the rare poison plant *Gastrolobium hamulosum*, with only 19 plants already known.

The group located a further 95 plants (a 600 per cent increase).

The group also helped Paul assess population dynamics of the unique Wongan cactus (*Daviesia euphorbioides*).

This plant is short-lived (reaching less than 15 years in age) and grows only after soil disturbance.

Three hundred and thirty plants were measured, but over 200 were dead and others were over-mature.

The cactus clearly needs active management if wild populations are to be maintained.

The Hills group, guided by John Carter, surveyed the verges of the Waddington-Wongan Hills Road, which contain

by
Verna Costello

two rare species and three priority species.

The group also surveyed remnant vegetation on private property owned by Duncan

and Mary Holmes, who joined the group for the day.

CALM staff wish to thank the Toodyay Naturalist Club volunteers and Duncan and Mary Holmes for their valuable assistance.

It is hoped that this will

become an annual Spring event, as there is still a great deal of work to be done at Wongan Hills if sound management practices are to be established to conserve individual rare species and maintain the integrity of the area as a whole.

River corridor study

FIELD work has been completed for the Save the Bush-funded South Coast Corridor Study.

Fifteen days were spent trapping in the bush corridor along the Fitzgerald River between Fitzgerald River National Park and Lake Magenta Nature Reserve; and eight days were spent along the Corackerup Creek corridor.

Biologist Sylvia Leighton, contracted by CALM to carry out the study, said that results were encouraging.

"We trapped a good number of mammals - honey possums, pygmy possums, a fat-tailed dunnart, a common dunnart - and quite a few reptiles and frogs," she said.

"Five long-necked

by
Verna Costello

tortoises were seen during a few hours canoeing up some of the long, permanent pools of the Corackerup Creek.

"Apart from a volunteer falling out of a canoe, the survey went more or less without a hitch."

During the second phase of the study in the Esperance District, surveys were conducted in both the Lort and Young River corridors.

There, the skills of wildlife officer Bernie Haberley, who set new records in establishing pit traps in tough sites, were thoroughly exploited.

So far the study has shown that the Fitzgerald and Corackerup corridors are rich in small mammals and birds and the Lort River is particularly rich in bird species.

Results of the second phase are now being analysed and a report on the whole study is expected to be completed by January 1992.

Waterbirds by colours

THE Department of Conservation and Land Management (CALM) is appealing to the public to help collect information about waterbirds.

The department is studying the movement of waterbirds in south-western Australian, especially around the Perth metropolitan area.

"The research will increase our understanding of bird biology and provide information about the value of wetland areas," said CALM waterbird researcher Stuart Halse.

CALM researchers have marked ducks with coloured saddles on their bills and attached coloured wing tags to egrets, ibises and spoonbills. Each tag has a two letter code.

"Some 1 800 waterbirds have been colour-marked over the past two years," said Mr Halse, "the tags are painless and do not harm the birds in any way."

The study is being run

by CALM and the Royal Australasian Ornithologists Union (RAOU). About 150 RAOU observers regularly undertake surveys and look for colour-marked birds but more help is needed.

"We would like as many reports of colour-marked ducks, ibis, egrets and spoonbills as possible, giving the location, date and colour-marking details.

Mr Halse said that people would probably need binoculars to read the code on the colour mark.

"Although we are interested in reports from anywhere in WA, we expect most birds will be in the south west.

"Reports from outside the metropolitan area, especially of ducks, are very important."

Information should be sent or phoned to CALM Wildlife Research Centre, PO Box 51, WANNEROO 6065, phone (09) 405 5100.



Our planet, their future

A RECENT television commercial showing a giant "Earth ball" being passed from generation to generation was produced with CALM's help.

The commercial publicised WA Children's Week and the theme "Our Planet, Their Future".

With such a theme, the organising committee decided to ask CALM for help.

"CALM seemed to be the logical people to talk to for environmental advice," Chairman of the

by Grahame Rowland

WA Children's Week Committee Patricia O'Sullivan said.

The result was a catchy 30-second promotional video that many people would have seen on commercial television.

The giant "Earth ball" advertisement was conceived by Swan Region's Hills Forest Manager Stev Slavin, together with the Children's Week Committee.

The lightweight world globe that is passed from the adults to the children in the clip is two and a half metres in diameter.

"As soon as I heard the Children's Week slogan I remembered the saying 'We do not inherit the Earth from our ancestors, but borrow it from our children'," Stev Slavin said.

"The video depicts the older generation looking after the world and then handing it over to a new generation."

The video, produced by

Channel 10, was filmed at Jacoby Park in Mundaring District and featured several CALM employees.

Max Bending, Brad Walter, Rod Crosswell, Mike Paxman and Grant Pronk donned a variety of outfits to represent a broad range of occupations, including a forest officer and a park ranger.

Stev said he was pleased with the outcome: "The exercise was good fun and helped a community group communicate a valuable environmental message," he said.

"For CALM to be approached to help out was quite a compliment."



The giant "Earth ball" and several CALM staff members were featured in a television advertisement for WA Children's Week.

Geike Gorge boat

THE new Geike Gorge tourist boat made its maiden voyage in November - from Albany to Fitzroy Crossing on the back of a truck.

The 180 seat boat will replace the 105 seater, which has been in service in Geike Gorge since the early 1980s.

It was taken from Albany, where it was built, to Fitzroy Crossing, in the State's top end, on a road train.

North-West freight company Gascoyne Trading transported the boat, free of charge, from Perth to Geike Gorge.

The \$97 000 boat was built by local Albany

by Caris Bailey

boatbuilders C and O D Westerberg Marine. Their successful tender was chosen from 12 submissions around Australia.

It will provide a significant boost to tourism in the Kimberley, where the growing number of visitors to Geike Gorge has increased demand for the tours.

Last year the park attracted about 30 000 visitors and this number is expected to keep rising by 10 per cent each year.

The tour is run twice

a day during the Kimberley tourist season by CALM rangers, who occasionally organise additional trips to carry waiting visitors.

The new boat is one of several improvements visitors will see at Geike Gorge next season.

Under CALM's park improvement program, a \$55 000 visitor centre is also being built, the reef walk trail is to be upgraded and a new river walk trail will be constructed.

CALM is now considering whether to move the smaller boat to another national park or put it up for tender.

Volunteer NEWS

Rats fall for baits

by Glen Gates

NOTHING gives more satisfaction than saving a life. Just ask the 13 CALM volunteers who recently journeyed to Barrow Island to complete the final phase of the Department's rat eradication program.

Through their efforts, a unique genetic strain of the endangered golden bandicoot has been saved from a life of competition and possible extinction due to the feral black rat on Middle Island.

Separated by only a narrow channel, Middle Island lies just south of Barrow Island and had become a final bastion where the black rat continued its ecological destruction.

No rats are believed to exist on either Barrow Island or Boodie Island, a small isle south of Middle Island, due to the success of earlier eradication programs.

Thought to have been brought by pearling luggers earlier this century, the rats

had formed their own niche in the island ecosystems, at the expense of the native fauna, much of which is endangered.

One and a half thousand poison bait stations were placed in a grid system covering the entire island, giving volunteers many opportunities to see the unique nature reserve.

The bait stations were specifically developed to allow only the black rat to enter them, so as to spare the golden bandicoot population.

As an added safeguard, the rats need to enter the station over three consecutive days, in order to consume a sufficient quantity of oats impregnated with an anti-coagulant poison.

Whilst the important task of constructing these bait stations and placing the poisoned baits inside was a pri-

ority, the volunteers experienced many firsts.

They made friends with endangered species found only on Barrow Island, sliced through the skies in the WAPET helicopter over a surreal landscape of spinifex, termite mounds and lufkins (the mechanical pumps that raise oil from underground reservoirs) and came face to face with hundreds of green turtles. They also met Harry Butler, who shared his vast knowledge of the island with them.

However, it was the company of the volunteers themselves, each with a personality as varied as the landscapes of Barrow, that captivated our memories of an island now dear to us all.

Hopefully, the black rat will now cease to interfere with the endangered species it has plagued for decades, thanks to the co-operation of WAPET, the CALM co-ordinators Keith Morris, Leigh Whisson, Greg Oliver a Peter Kendrick and CALM volunteers.



Black rat. Illustration by Sandra Mitchell

Kew visitors

THE Deputy Director of the world's greatest botanical organisation visited Perth recently to see WA's famous flora.

Professor Gren Lucas, from the Royal Botanic Gardens at Kew, flew in for a four-day visit.

During this time he visited CALM's WA Herbarium, which is a world leader in databasing of specimens.

The herbarium at Kew has important connections with WA, since it holds many of the important early collections of Australian plants, such as those of James Drummond.

Kew herbarium receives so many enquiries about Australian flora that

an Australian botanist is based at Kew each year. Last year CALM's Terry McPharlane was the Australian botanical liaison officer.

Gren is very interested in threatened plants, so a trip to Mount Lesueur was high on his list of priorities.

"Mount Lesueur was absolutely stunning. It was just as diverse as a rainforest. For instance, we saw 40 different legume species in 24 hours," he said.

"In a world sense WA's flora is very important. The State has half the number of species of the whole of Europe. It is important to rationalise the manpower available to ensure there is

good management of the world's flora where it is needed."

Gren also toured the jarrah forest and saw the endemic species in the Darling Scarp and inspected the research being done on rare flora at Kings Park, including cryostorage of endangered species, also a world first.

"It is very important to have a uniform system for recording data on the world's flora. We need to know objectively how rare each plant is, so that we can prioritise management and resources."

"We also need to understand the whole biology of each plant, not just give it a name."



Neville Marchant of CALM, Gren Lucas and Michael Locke from Kew Gardens and Kings Park botanist Kingsley Dixon. Photo by Carolyn Thomson

Fencing rainforest

CALM volunteers from Kununurra have just completed a fencing project to protect a small pocket of rainforest from feral cattle in the Mitchell Plateau. Despite aching backs and blistered hands the fence was erected within one week. CALM volunteer Estelle Leyland gives her impressions of the project.

"The Mitchell Plateau is a fascinating place of remnant rainforest, rolling hills, high waterfalls and waterways bordered by riverine forest. Although affected by pastoral activities, this area remains much the same as it has been over many centuries, and we hope to keep it that way.

"With a working party from CALM in Kununurra this volunteer travelled into this vast region to help erect a fence in the rainforest

around a small pocket of vine thicket. Feral cattle had been sheltering in it by day, damaging the young trees and vine stems.

"The understorey vegetation had been completely eaten out, leaving the floor bare. Since CALM began observing these areas, the depredations of feral cattle have caused these remnants to shrink, raising concern for their future. The vine thicket that is now fenced, will be watched with interest over the next few years and will hopefully return to its former vigour.

Rainbow pitta

"These remnant rainforests are inhabited by unusual birds, such as the rainbow pitta and scrub fowl. It was a delight to observe the behaviour of a great bower bird, who had his

playground on a rise within the vine thicket. From a distance of four metres I watched courtship, display and defence and was amazed by his power of mimicry.

Rock rat

"A list of 33 birds was completed, many species of rainforest plants collected, an unidentified rock rat, a species of snail, a fish and a turtle will add to our knowledge of the area, which needs good management as soon as possible to preserve its unique beauty.

"Many places on the Plateau, such as the Mitchell Falls, are showing the stress of increasing tourism. With improved roads more and more people are discovering the splendour of the region. Bushfires have devastated large areas over the last few sea-

sons, some deliberately lit, others either originating from natural causes or careless campfires.

"Most of the t. Livistonia palms show evidence of last year's fires and in many places the shrubs and herbs have been slow to return. The Plateau is to become a national park or reserve, properly managed and protected so that future generations can see the ancient beauty of our remote north.

"In spite of aching backs, blistered hands and layers of dust we all felt satisfied with a job well done, and for me a personal satisfaction that, as a volunteer, I had the privilege of helping the dedicated staff of CALM, if only in a small way, to protect a lovely part of this wonderful land - the Kimberley."