

CALM NEWS

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

COMO RESOURCE CENTRE
DEPARTMENT OF CONSERVATION
& LAND MANAGEMENT
WESTERN AUSTRALIA

May 1992



CALM wildlife officer Kingsley Miller inspects a cockatoo nest. INSET: white-tailed black cockatoos. Photos by Jon Green

DNA tests protect native cockatoos

SCIENTIFIC tests similar to those used to determine human paternity suits and solve criminal cases are being used in WA to crack down on native bird poaching.

Environment Minister Bob Pearce said DNA fingerprinting had already identified birds illegally trapped in the wild and passed off as the offspring of captive birds.

"Two aviculturists have been successfully prosecuted by CALM under the Wildlife Conservation Act and another six cases are pending," Mr Pearce said.

"Wildlife officers were concerned at the level of nest robbing in the wild. At the same time, there was a dramatic increase in the number of aviculturists reporting breeding success in cockatoos, which are known to be very difficult to breed in captivity.

"They approached scientists at Curtin University, who are pioneering some of the work on ge-

netic fingerprinting in Australia, to set up data bases for white-tailed and red-tailed black cockatoos.

"Both species are declining in number in the wild and their scarcity makes a captive pair of red-tails worth \$5,000 on the local market - the black market in smuggled Australian birds pays far more.

Technology

"Of course, the majority of aviculturists just enjoy their hobby and follow their licence conditions to the letter.

"However, the technology that allows us to identify and prosecute illegal bird trappers could benefit all aviculturists.

"Genetic fingerprinting could be used to sex hatchlings born in captivity and to establish bird pedigrees - both could increase the value of birds for sale."

The pattern of genetic information in the DNA

molecule is as unique as a fingerprint.

Unrelated individuals vary considerably, but there's a correlation between members of the same family as offspring inherit genetic characteristics from both parents.

Minute blood samples - usually less than half a millilitre is taken from the bird - are put through a series of chemical processes and the bands of genetic material are recorded photographically.

This picture resembles the bar codes used to price supermarket goods and allows the genetic patterns of individuals to be compared and analysed.

"This technology is also being used to study family relationships in other species, including the western swamp tortoise, golden bandicoot and black-flanked rock wallaby - all endangered.

"Wildlife agencies elsewhere in Australia and overseas are now asking

Curtin and CALM to help them set up similar programs, which is a credit to those who took the initiative."



New home for freed dolphins

THREE of the Atlantis dolphins have found a new home in a landmark agreement between CALM and Underwater World.

Environment Minister Bob Pearce announced the establishment of a new marine mammal program which would see the dolphins based in a semi-captive facility at Underwater World in Hillarys Boat Harbour.

Mr Pearce said of the original nine Atlantis dolphins being rehabilitated back into the wild, Mila, Rajah and Echo had not been foraging for food successfully and had lost weight.

"The well-being of the dolphins is our main concern and expert opinion is that these dolphins will probably never be able to become fully independent in the wild," he said.

"This new program will give the dolphins a secure home at Underwater World but they will be taken out to sea regularly under the supervision of dolphin experts.

"There will be no dolphin performances as there were at Atlantis."

Mr Pearce said the three dolphins had been recaptured and were now being cared for at Two

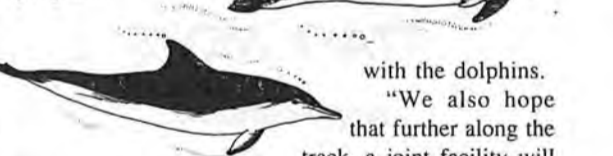
Rocks until a special semi-captive facility was built in the harbour, adjacent to Underwater World.

"It is expected that the dolphins will be transferred to Hillarys in July once a new sea pen is built," he said.

Congratulated

Mr Pearce congratulated all those responsible for the successful rehabilitation of the Atlantis seals and most of the dolphins.

He said the State Government appreciated the efforts made by the Tokyu Corporation, the Japanese company which owned Atlantis, which had spent more than \$2 million on the rehabilitation program.



Since the nine Atlantis dolphins were released in January, two had survived well in the wild and had travelled considerable distances from the release site at Two Rocks Marina.

Three others are thought to be doing well in the wild. However, their whereabouts are unknown as radio tracking equip-

ment appeared to have failed. One dolphin calf had died.

Mr Pearce said the new facility at Underwater World would provide access for the public with a focus on education, research and marine conservation generally.

"Education programs will be established jointly by CALM and Underwater World to help develop public awareness and concern for marine mammal conservation.

"As well, a program will be formulated to allow existing CALM, Marmion Marine Park and Underwater World volunteers to help

with the dolphins.

"We also hope that further along the track, a joint facility will be established at Hillarys to care for and rehabilitate stranded marine mammals," Mr Pearce said.

Underwater World and CALM will continue to monitor the remaining five dolphins over the next twelve months.

At the end of this period the whole program will be reviewed.

Arbor Day

TREES FOR ALL REASONS

THE theme of this year's Arbor Day, on June 5, is *Trees For All Reasons*.

CALM promotes Arbor Day to create a wider and greater understanding in the community of the value of trees in our lives, and the role that CALM plays in achieving a balance between the needs and wants of the community and the needs of the environment-integrated management.

CALM's Arbor Day poster will reflect this - showing some of the roles of trees in society today, including providing timber for housing, habitat for wildlife, the fact that they are essential for water quality, and creating an environment for recreation.

For Arbor Day, tree plantings will be carried out by CALM staff in conjunction with community and school groups throughout the State, and talks will be given by CALM staff at many schools.

A children's Arbor Day poster competition is

run annually by the Department, sponsored by *LANDSCOPE* magazine and Radio 6WF.

This year's competition was announced in early May by CALM Executive Director Dr Syd Shea and 6WF presenter Ted Bull.

And on the day, an Arbor Day celebration will be held at Matilda Bay Nature Reserve in Perth with schoolchildren from years 5 to 7.

As Arbor Day is also World Environment Day, CALM will also participate in an EPA Green Train display at Fremantle.



ONE of the major messages to come out of the recent national parks congress in Venezuela was the need for all conservation management agencies to build up community support.

One of the best ways to enfranchise such support is to provide top class service to our users. I think that this message is generally well understood by CALM staff - and it needs to be.

The 4.5 million visits to the land we manage each year - a high figure for our population size - means that on average, every man, woman and child visits us nearly three times a year.

Providing top class service in the bush comes in a number of ways - good site design, clean facilities, clear and easily accessible information and courteous attention to name a few.

We still have a way to go yet, and we always will, but I can tell you we are making good progress and setting high standards all over the State, and this is in spite of the difficulties we face with finding resources.

I have to tell you of two quite superb efforts that I have seen recently.

One is the work being done in the Collie District around Wellington Dam, especially the campsite at Honeymoon Pool - lovely surroundings complemented by good management, to allow the best kind of interaction between humanity and nature.

I wish that John Muir, one of the fathers of the national parks movement in the US, could see it.

The other was quite different: the organisation of the new koalas for Yanchep and all the ceremony that went with that. Staff from many parts of the department worked together and produced a top result.

Thanks to all who pulled out the stops to get it done, especially the staff at the park and in the Wanneroo District at the last minute.

These are just two of our good recreation products. We will be facing challenges to do well, or better, in the future - even with the same, or fewer, resources.

We will be doing this through a number of ways, but especially by focusing our efforts on priority projects and we will also be broadening our fees and charges base.

The latter is always a challenge, especially where people have been taking our services for granted, free of charge, but where we are delivering a good product, like the above examples, we know people are getting good value for money.

Chris Haynes, Director of National Parks

A CALMing solution

OVERCOMING personal problems is like moving furniture.

Most of the time you can do the shifting yourself or with the help of friends. Sometimes the items are too big or there are too many.

Everyone can be faced with this situation.

Two counselling brochures, one for CALM employees and the other for managers and supervisors, were distributed in April.

If you haven't received your copy phone David Greenhill at Human Resources Branch, Como (09) 367 0358.

The brochures contain



CALM staff councillor David Greenhill

basic information about CALM's counselling service for which David is responsible.

You may not need the information now but keep it handy in case you, or a friend at work, ever do.

The counselling service is in addition to the helping links that normally exist between workplace employees.

Counselling

Apart from providing counselling it can also be used for obtaining information, for example about social services, entitlements and the like.

What's counselling? In this case it means talking with a qualified person about problems or other worrying matters - the aim being to find successful ways of resolving the difficulty.

Often, by talking and taking a fresh approach new options can be identified. These can then lead to solving the problem or at least making it manageable. Discussing the problem is usually the way things start.

'Lost' reserve comes back

FEBRUARY saw a 'lost' nature reserve return to the conservation estate.

The area of 187 hectares commonly called Locke Estate is located about 10 kilometres west of Busselton. It is on the south side of Caves Road, just west of the Bussell Highway/Caves Road junction.

The area was a nature reserve prior to 1966. However, due to a dispute over grazing of the area, the Fauna Protection Advisory Committee - the vesting body at the time - suggested that the purpose of the reserve be changed to remove the anomaly of a nature reserve also being the subject of a grazing lease.

Its reservation was subsequently revoked and the area became vacant Crown land for the next 26 years. Various wildlife officers kept a watch over the area through the 1960s and 1970s.

During 1983 and 1984 Wildlife Officer Peter Lambert carried out a number of inspections of the area and in January 1985 he recommended that a strong case be put to the Department of Lands and Surveys to cancel the grazing lease and reinstate the area as a nature reserve.

This approach was made but, because of the existence of a coal resource under the area, the Department of Mines then objected to reservation.

Liaison between CALM, Mines and DOLA ensued and last year an agreement was reached whereby the area could again become a nature reserve. The grazing lease was subsequently cancelled and on 11 February 1992 the Government Gazette announced that the area (now designated as Reserve 41972) was again a reserve for the conservation of flora and fauna.

Welcome home, Locke Estate!

LETTERS

Well done!

My students and I were very impressed with the Mundaring camp organised by Fiona Marr.

It was a relaxed, well structured and educational excursion. One of the best features was the leadership role of CALM personnel enabling me to be a participant rather than a "teacher".

The only complaints I have received from my class suggest that our stay was too short. Fiona's preparation and follow-up study of our excursion reflect her dedication to her job.

R BIGWOOD
Environmental Coordinator
Glengarry Primary School
Yes, the camp did prove a real success thanks to the excellent efforts of CALM's Mundaring field staff John Carter and Jean Butts who got the students really involved - Editor.

Sometimes this will lead to an outside specialist referral if this is what the employee wants.

Above all, the matters discussed are treated confidentially. You need tell no-one the reason for seeking advice or counselling assistance although you will need to advise your supervisor that you wish to do so and make arrangements for this at work.

Alternatively you may seek the advice or counselling in your own time.

Any counselling assistance CALM provides is

free. This includes attending meetings and phone calls made in work time.

Where, with the employee's prior agreement, referral is made to an outside agency, the costs are met by the employee.

CALM began its counselling service, like an increasing number of other departments, believing in the value of offering additional help to employees in overcoming personal and work-related problems.

The expected outcome is that the employee will

gain by becoming a happier person whilst the employer benefits from having a more effective worker.

The common aim is improved well-being amongst employees.

David Greenhill can be contacted directly or you can ask your supervisor to arrange an appointment. David has been with the Department since 1985. He holds a post-graduate qualification in clinical psychology (he says not to let that worry you) and has wide experience in the welfare field.



CALM Classified

THIS column is divided into sections dealing with 'for hire', 'for sale', 'surplus equipment', 'swap', or 'wanted'.

If you have any equipment or requirement that you wish to advertise through this new service, please send or fax type-written details to:

The Editor,
CALM NEWS,
Corporate Relations Division

For Hire

Lewis saw with experienced operators. \$30.00/h plus wages and plant. Contact Alan Hordacre, Collie 341 988.

For Sale

Reliable and efficient COMPAQ LTE 286 notebook PC with carry bag, charger unit, 20Mb hard disk, 2 extra Mb RAM, MS Word 5 (with all manuals) and CALM ADMIN system installed. \$1 500. Contact Frank McKinnell, Crawley 386 8811.

Surplus Equipment

1 off 3-point linkage water pump. Output 81 000 L/h. Contact T Kenneally, Collie 341 988.

1 off Massey Ferguson Tractor (55kW). Available until 31 May 1992. Contact

Jim Raper, Collie 341 988.

1 photocopier for sale \$300. Contact Hugh Clift, Perth 405 5132.

1 off Baby Giant Plough. Contact Alan Hordacre, Collie 341 988.

1 off 3-point linkage fertiliser spreader. Contact Jim Raper, Collie 341 988.

1 off 3-point linkage slasher. Contact Jim Raper, Collie 341 988.

Swap

New photocopier for one that will copy both sides of the paper automatically. Contact B. Buchanan, Collie 341 988.

Atari PC, as new condition, for an NEC PC with numeric keypad (101

keyboard). Contact V Cleggett, Collie 341 988.

Wanted

Refrigerated air-conditioners to suit office building. Contact P. Moore, Collie 341 988.

Inkjet printer. Contact V. Cleggett, Collie 341 988. 4x4 motorbike with boomspray needed for winter 1992. Contact M. Nilsson, Collie 341 988.

Fridge. Contact Gary Brown, Collie 341 988.

One D3 desk or ergonomic desk. Can exchange with a D4 desk. One adjustable footrest. Can exchange with a fixed footrest. Contact Warwick Boardman, Como, 367 0472

STAFF NEWS

Appointments

Katherine McGregor, Officer, Broome; Tiffanie Munro, Officer, Merredin.

Promotion

Simon Penfold, Afforestation Manager, Manjimup.

Transfers

Tim Duncanson, Assistant District Forest Officer, to Perth district.

Mobile Ranger Moves

Central Forest Region - Trevor Anderson, Leeuwin-Naturaliste.

Relay really?

IT'S time to start thinking about the Big Brook Relay! November 14 is the date of the annual test of CALM's best.

Any seven people from a work area can get together and participate. The events are a 7 km run, a 12 km cycle, a 3 km paddle in a Canadian canoe, an 850m

swim and a cross-cut saw event - slicing through five 300 mm slabs.

Get a team together, pack an esky, and prepare to join the fun at Big Brook Dam in Pemberton. Entry forms will be ready by the end of August and will be available from the Pemberton District Office.

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Deadline for CALM NEWS is the 10th of the preceding month.

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Volunteer of the year awards



ABOVE: Richard Trigwell, Terry Hales, Brenda Trigwell Outstanding Service Award

BELOW: Norm and Gwen Cole, Laurie and Colleen Melling, Ian Ulyatt. Volunteer of the Year Visitor Services Centre



Seaweek's SOS

CALM, along with Underwater World and the Department of Marine and Harbours, co-sponsored Seaweek '92, which had the theme "Marine Parks - Saving Our Seas".

Seaweek is an annual Marine Education Society of Australasia (MESA) event, held Australia wide, with the WA festival being by far the biggest. A theme is chosen each year to highlight different aspects of the marine environment, and promote the wise use, enjoyment, understanding and protection of marine resources and the environment.

Events were opened on May 3 at Fremantle Fishing Boat Harbour by Minister for Environment Bob Pearce.

Hundreds of people browsed through marquees housing displays from UWA, Fisheries, Marine and Harbours, CSIRO, Greenpeace, CALM, Navel Cadets, to model steamships and much

by Terry Goodlich

more. Demonstrations such as flare and life raft display, air sea rescue (with RAAF and Police Air Wing helicopters) and CALM whale stranding rescue equipment attracted much interest.

During the week, there were shopping centre displays, guided tours of Shoalwater Islands Marine Park, museum displays and free evening lectures at Underwater World by CALM staff. The final weekend was held at Hillarys Boat Harbour on May 9 and 10. HMAS Geraldton, a 42 m patrol vessel, berthed at Sorrento Quay and remained open for tours and displays. Boat Torque cruises ran free tours of Marmion Marine Park, guided by CALM staff and volunteers.

On May 9, Underwater World offered half price en-

try, which was well received. Each day, the Fisheries Department held talks on "Fishing for the Future". Events were closed with a fly-over by RAAF planes, and a Beach Ball held at Underwater World.

I knew that co-ordinating Seaweek '92 was going to be hard work - especially finding financial sponsorship in today's economic times. What I didn't expect was the dedication and enthusiasm shown by countless people who really care about the environment. Many worked long hours and did lots of running around delivering posters, programs and were generally indispensable.

People who visited Seaweek displays and events appreciated the effort that went into making education fun and interesting, without trivialising the complexity of preserving our marine environment and its resources.

LAST year more than 900 Western Australians volunteered to work with CALM, in duties as diverse as working as guides in marine parks and as research assistants on remote islands.

Nine of these volunteers were presented with Volunteer of the Year awards by Environment Minister Bob Pearce last month.

Mr Pearce also awarded outstanding service certificates and Certificates of Appreciation to other CALM volunteers.

"People do not volunteer in order to win awards or receive recognition," Mr Pearce said.

"But it is vital that we recognise the very valuable contribution they make to the community. I am sure volunteers derive a tremendous amount of enjoyment from what they do and a great sense of satisfaction. It also attracts the type of person who wants to do something worthwhile in areas that concern them.

"Too often it is easier to sit back and criticise what is or is not being done for the environment, rather than doing something positive about it," he said.

"I want to offer my thanks to these people and all the other volunteers in Western Australia who have made the effort, and who have taken up the challenge to physically do something them-

selves to better the environment in this State."

Mr Pearce said volunteers, working alongside CALM staff and on their own, ensured that projects could progress faster and services could be provided to the public that would not otherwise be available.

Four million

He said there were more than four million volunteers Australia-wide who provided essential services in the community, such as fighting fires, running emergency services and caring for injured wildlife.

Volunteer of the Year awards were presented to:

* Ruth Bettenay for her work as a member of the Shoalwater Islands Marine Park Volunteer Guides;
* Gwen and Norm Cole, Dawn and Noel Gillingham, Colleen and Laurie Melling and Ian Ulyatt, for their work as camp ground hosts at Cape Range National Park; and
* Edwin 'Tanny' Robinson, for his work on the WA Marine Turtle project on islands west of Karratha.

Mr Pearce also awarded Outstanding Service Certificates to:

Richard and Brenda Trigwell, who have managed and cared for a number of reserves in WA, one of which bears their name, since the early 1950s; and Estelle Leyland, who

has worked on various projects including activity programs for national park visitors and collecting flora specimens for herbaria in the Pilbara and Kimberley.

Of the 900 people who worked for CALM as volunteers in 1990/91, many were students, retired peo-

ple, full or part-time workers and unemployed people.

Volunteers work in many areas within CALM, including wildlife management and research, forest research, wildflower garden management, coastal rehabilitation, park information and interpretation.

BELOW: Estelle Leyland, Terry Hales Outstanding Service Award



Steve's new challenge

STEVE Hopper, Senior Principal Research Scientist with CALM, has just been appointed Director of Kings Park and Botanic Garden.

Steve has been at Woodvale since 1977 and has been involved in the establishment and development of administrative, research and management procedures for the conservation of endangered flora.

During his time with

CALM Steve has completed major research projects such as *The Banksia Atlas*, studies on orchids, with Andrew Brown, and on eucalypts, with Ian Brooker of the CSIRO and others, and on conservation genetics.

Mt Lesueur

He was also involved with the successful creation of the Mt Lesueur National Park and other issues concerning the CALM estate.

LANDSCOPE readers have long appreciated Steve's various articles and stunning photographs.

The most recent issue included his article "In the Footsteps of Giles" in which he traced the steps of the famous explorer

through the northern deserts of WA and helped identify the recently re-discovered Giles' mallee (*Eucalyptus rameliana*) - presumed extinct for over 150 years.

Aside from his experience at CALM, Steve brings a solid background of expertise to his job at Kings Park.

He has a BSc and PhD from the University of Western Australia.

Steve worked as a consultant at the Western Australian Herbarium in 1977 and was the first flora conservation research officer with the Department of Fisheries and Wildlife.

Steve is looking forward to meeting new challenges as Director of

Kings Park and Botanic Garden.

"I see the park as a place to celebrate and understand the relationships between people and plants, to quietly contemplate the past and our predecessors, to refresh the spirit through becoming absorbed in nature, and to enjoy the simple pleasures of Perth outdoors," said Steve.

Wishes

He wishes all CALM staff well for the future and looks forward to a continuing working relationship with them.

"You're welcome to visit me in the park any time, and to continue to harangue me for eucalypt identifications," he said.

Shell shocked recovery

JUVENILE loggerhead turtles washed onto metropolitan beaches last winter were taken to North West Cape and released back into their natural habitat at Ningaloo Marine Park.

Most of the turtles were handed to CALM by people who found them along the coast between Perth and Bunbury.

It was the first time that such a large number of loggerhead turtle hatchlings had been seen in this area since 1964.

The turtles were rehabilitated at Underwater World at Hillarys Boat

Harbour. Of the original 80 - 90 turtles washed ashore, 41 have survived and of these, 23 are being released back into the wild.

The rest will be given a greater chance of survival by being raised further in captivity and will be housed at aquarium facilities at Underwater World.

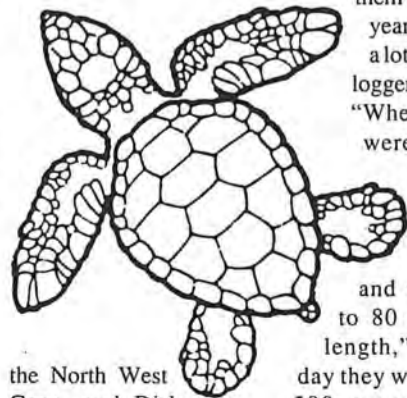
Threatened

CALM research scientist Bob Prince said loggerhead turtles were the most threatened of the Australian nesting marine turtle species.

In Western Australia, their main breeding areas were on Muiron Islands off

these animals and the generosity of Underwater World in rehabilitating them during the past year, we've learnt a lot about juvenile loggerhead turtles.

"When the turtles were found they ranged from between 50 and 80 grams in weight and measured 60 to 80 mm in shell length," he said "today they weigh between 500 grams and 1100 grams and measure between 115 and 170 mm in shell length."



Terry to the rescue

CALM maintenance employee Roger Marcombe has a helpful BMA worker to thank for receiving quick first aid treatment after a recent accident.

A gas barbecue on the Matilda Bay foreshore exploded while Roger was servicing it.

He was badly burnt on the face and arms but man-

aged to recall his first aid training and headed straight for the river.

Emergency

Terry Davies of Parkwood, a tractor driver in the Building Management Authority's mowing and gardening branch, rushed to his aid and took Roger straight to the emer-

gency centre at QEII where he knew they had a burns unit.

Terry waited with Roger at the hospital until he was assured that Roger was OK, then he went back to work mowing.

Roger was later released from hospital and, after a short period of recovery, is back at Matilda Bay.

Yanchep koalas - on a leaf and a prayer

EFFORTS are being made to re-establish a healthy breeding colony of koalas at Yanchep National Park.

Releasing four new koalas into the park's enclosure this month, Environment Minister Bob Pearce said the existing colony was infected with chlamydia, a disease common in koalas and which caused infertility.

"Unfortunately, our existing population of five koalas has not bred successfully for nearly ten years and we have had to

seek new breeding stock from South Australia, Mr Pearce said.

Disease-free

"Four young females were brought to Perth, provided courtesy of the South Australian National Parks and Wildlife Service from the disease-free koala colony on Kangaroo Island.

"This initiative is part of the State Government's Park Improvement Program to upgrade facilities and services in the State's national parks," he said.

"We are grateful to the South Australian authorities for their cooperation, and thanks must also go to Ansett Australia, which generously sponsored the transport of the koalas from Adelaide to Perth."

Mr Pearce said efforts would be made to bring more healthy koalas of both sexes to Western Australia, so that a healthy breeding colony was established at Yanchep.

"In the meantime it is important that the new arrivals are kept separate

from the existing koala colony to prevent any cross infection. As a result, the original five koalas have been moved to a new enclosure in another section of the park."

The koala colony is the park's major tourist attraction. The park draws over 400,000 visitors every year - more than one third coming from interstate and overseas.

*Two of the koalas that Environment Minister Bob Pearce released into their new homes.
Photo courtesy of The Sunday Times*



Class and staff of the Training Centre. Standing from left: Keith Lillie, Nigel Sercombe (Training Officer), Aminya Koch, Matthew Jones, Iain Alexander, Andrew Milne, Mark Lush, Alan Byrne (Training Officer), Jeremy Spencer, John Fishwick, Warwick Roe, Rose Haggitt (Clerical Officer), John Edwards, Stephen White, Joy Borison, Teresa Ashcroft (Cook). Kneeling in front: Bruno Rikli, David Atkins, Ian Gale. Photo by Jeff Henderson

CALM's outstanding cadets

STEPHEN White, now a Forest Officer at the Harvey District, was recently presented with the coveted Keynes Memorial Prize by Executive Director Syd Shea at the Lord Forrest Hotel, Bunbury.

The Keynes Memorial Prize is awarded to the field cadet who demonstrates outstanding performance in both theory and practical field work.

Dr Shea spoke highly of the course program and how it had provided a steady flow of trained staff to meet CALM's needs to provide competent junior supervisors and managers.

The course also lays the foundations on which field officers can develop satisfying and challenging careers, he said.

Dr Shea said that unfortunately the training program will close and CALM will recruit graduates from tertiary institutions.

by Alan Byrne

This was mainly due to the difficulty of keeping abreast of changes and improvement in education and training. The department will capitalise on the educational expertise and resources of tertiary institutions, with syllabus and lecturing input from specialist CALM staff.

He then presented certificates awarded by CALM and the Assistant Regional Director South West College of TAFE, Mr Ron Parkes, presented the certificates awarded by TAFE.

General Manager Roger Underwood was also on hand to congratulate and welcome the graduates into CALM and presented the Executive Director's Award to Warwick Roe for all-round merit in all aspects of the course.

Warwick works as a technical officer in the

Wheatbelt Region based in Narrogin.

They had all successfully completed a two-year cadetship which involves theoretical and practical lessons. For the first year, cadets attended Bunbury South West College, studying biology, fauna charac-

teristics and identification, ecology, mapping and horticultural soils.

Their second year was spent at CALM's Dwellington Cadet Training centre, where they received theoretical and practical instruction in silvicultural management, fire manage-

ment, recreation law enforcement, environmental protection and utilisation of forest products.

CALM News apologises to Stephen White, who is the top cadet in the class. Another cadet was incorrectly named in the April issue as top cadet - Editor

Rain, rain go away

solve the mystery of why more than 90 per cent of medium-sized mammals have disappeared from the Australian deserts over the past 30 years.

The floods occurred after extremely heavy rains in the inland areas.

Vehicles travelling to the desert to carry out baiting for feral animals and other vital preparation work could not reach the release site.

They were repeatedly bogged and eventually had

to turn back because of the flooding.

"There are now huge lakes in the area, stretching for kilometres, in places where such large bodies of water have never been recorded before," said CALM Executive Director Dr Syd Shea.

"A large section of the Gunbarrel Highway is completely washed out.

"This kind of weather is extremely unusual in these areas.

"It is disappointing

Tree farm info days

A FLURRY of field days and seminars on trees in farming put the spotlight on opportunities for production improvements and farm diversification.

CALM's specialist rural advisers took the latest word on tree management to people on the land at Kojonup, Dandaragan, Cranbrook, and Wellstead.

These officers - Pat Ryan, Peter White, Wally Edgecombe, Richard Moore and Peter Beatty - work with the Department's Vegetation and Tree Planting Advisory Service (VATPAS), headed by John Bartle.

The proper pruning and culling of six-year-old eucalypts to enhance their timber value was the focus of a field exercise on April 1.

A demonstration on a tree plot planted near a salinised gully at Peter McCleay's property, south-east of Kojonup, was carried out by CALM agroforestry research scientist Richard Moore.

The activity was initiated by the landowner himself, and a dozen or so local farmers came along. Richard, assisted by Peter White and Peter Beatty,

showed how to select crop trees, and to prune and cull with an array of tools.

"We need agroforestry to work for us in this lower rainfall country," said Peter McCleay, "and see how easy it is to manage some of our plantings as future timber trees is an exciting step forward."

On April 2, the Dandaragan Progress Association sponsored a Tree Grower seminar and breakfast, where timber production prospects were presented. CALM's Pat Ryan discussed pinaster pine agroforestry and sandalwood propagation. Wally Edgecombe discussed the integration of trees into property management and Peter Beatty outlined wood production economics.

Local identities and farm innovators John Cook (tagasaste grower) and Ian Wilson (forestry enthusiast) are leading the push for progress in using trees for farm diversity and production in their area.

On April 3, at a 1 River LCD Open Day eucalypt woodlot pruning was again demonstrated, this time by Peter Beatty. Twenty Kendenup Primary School students showed farmers and community supporters the way. In forty minutes 60 trees were trimmed and measured.

On April 7, a "Living With Trees" seminar was held at Wellstead.

Peter White and John Bartle joined John Colwill, Alex Campbell, Jos Chatfield, Ron Watkins, and Ian and Bev Lynch in contributing information and inspiration to the day.

Farming communities do want to grasp tree-based solutions to land management problems - and our vegetation advisers are helping them to do just that.