Conservation N



AUGUST 2005

Minister inspects 'western front'

ENVIRONMENT and Science Minister, Judy Edwards, and CALM Acting Nature Conservation Director, Gordon Wyre, have visited the 'western front' of the State Government's campaign against cane toads.

They visited the Timber Creek area along the Victoria River, 200 km east of the Western Australia-Northern Territory border, to inspect measures being undertaken to stem the spread of the 'biological bombshells'.

The Minister said a key feature of the WA campaign was to work collaboratively with the Territory.

"The degree of cooperation between the NT Parks and Wildlife Service and CALM is critical to the success of the strategy being implemented," she said.

"I was particularly impressed at the degree of enthusiasm and collaboration staff from both agencies have for this

"WA is the only State that so far has implemented active control and management initiatives ahead of the invasion of the toads. However, it is clear that we can learn much from the experience of Territorians.'

Following the Minister's trip, Premier Geoff Gallop announced a further \$1 million towards the cane toad initiative comprising \$500,000 for community awareness programs and \$500,000 to the Stop the Toad Foundation.

The latest allocation brings to \$2.5 million the amount the State Government has committed to the fight against cane toads in the past eight months.

"It was evident from Dr Edwards' visit to the Kimberley and Northern Territory that community involvement and awareness are critical elements in the Government's overall strategies to try to contain the toads to the east of the Victoria River," Dr Gallop said.

"The representatives from Stop the Toad have demonstrated

that they want to complement the State cane toad initiative with community involvement in 'on the ground' actions such as trapping."

Dr Edwards said measures taken under the State Government's cane toad strategy had included:

- developing and implementing a pre-emptive trapping program in the NT, including further trials and development of trap designs:
- significantly strengthening quarantine arrangements on the WA/NT border to capture hitch-hiking toads;
- · mapping the NT distribution and key dry season refuges that can be the focus of control efforts;
- identifying east Kimberley biodiversity hotspot assets at risk from toads; and
- producing information material for the broad community to raise awareness of the looming cane toad menace.

The Government is also exploring the possibility of using 'sniffer dogs' at quarantine checkpoints, as well as establishing a network of acoustic towers along remote areas of the Victoria River to detect the toads' distinctive 'purr'.

A four-person cane toad surveillance and control team has been based in Kununurra to implement the surveillance and control actions as well as investigating cane toad reports in the East Kimberley and Victoria River region.

'This team has so far covered 25,000 km in the area and identified 120 waterholes, ponds and swamps that would be cane toad habitat. They also have inspected around 55 waterways," Dr Edwards said.

"Traps have been set up in caravan parks around Kununurra, in the Keep River National Park, Timber Creek, Coolibah crocodile farm and at Victoria River Bridge. Other traps will be set up at Big Horse Creek and on pastoral stations inside



Environment Minister, Judy Edwards, and Kimberley MLA, Carol Martin, inspect a cane toad trap with CALM's cane toad team members Martin Hadley and Larry Ford. Traps have been placed at caravan parks in Kununurra as part of the State Government's cane toad initiative. Photo - Nigel Higgs



Wildlife carer, June Butcher, from Kanyana Wildlife Rehabilitation Centre with a woylie, one of the 15 mammal species that were originally found on Dirk Hartog Island. Photo - Rhianna Mooney

Dirk Hartog WA's newest national park

DIRK Hartog Island, in the World Heritage listed Shark Bay region, is to become a national park.

The State Government recently signed an agreement with the island's lessees that ends a 15-year negotiation to return the island to the people of WA.

Environment Minister, Judy Edwards, said Dirk Hartog Island had long been identified as a conservation priority

"The island has tremendous biodiversity conservation values with more than 250 native plant species, 84 species of birds and 27 species of reptiles," Dr Edwards said.

"Two birds and one reptile - the black and white fairy wren and southern emu wren and the western spiny skink - are found nowhere else.

"Several acacias, hakeas and even a species of sandalwood also are endemic. The island also is a major nesting area for loggerhead turtles, with as many as 400 breeding on the north-eastern corner.

"Many of the 15 native mammal species originally found on the island are now locally extinct but 11 of these species will be reintroduced after CALM undertakes a restoration program of the island's vegetation and eradicates goats and feral cats."

These mammals - most of them listed as threatened included the chuditch, dibbler, long-tailed dunnart, western barred bandicoot, woylie and boodie.

"The island will become a secure haven for threatened species and will enhance the overall values of the area that make Shark Bay worthy of World Heritage listing," Dr Edwards said.

The Government's agreement with the Wardle family tinguishes the pastoral lease on the island

The family, which owns 40 ha around the island homestead, has held the pastoral lease for the past 35 years.

As compensation for the lease, the family has negotiated to buy three small parcels of land so limited, low-key eco-tourism accommodation facilities could be established in designated areas.

"The 33.2 ha of land includes two areas in Sunday Island Bay and one next to the family homestead," Premier Geoff Gallop said.

"To ensure the operation remains low-key, a number of conditions have been attached to the title of the land, and any activity will be subject to the appropriate approvals.

"An additional small area of land (2.5 ha), near Turtle Bay in the north of the island, will be leased to the family by the Shire of Shark Bay."

The island is the site of the first European landing in Australia. It is named after the Dutch explorer who landed at Cape Inscription in 1616 and left an inscribed pewter plate nailed to a post.

Working Together

One of the significant challenges facing organisations such as CALM is information management. We are an agency that is rich in information about the areas we manage and the State's biodiversity. The extent of information that we hold continues to increase at a rapid rate, and it is essential that our information is organised and mobilised so that it is readily available to our staff and to the broader community.

The Department's Corporate Executive has discussed this topic regularly over the years, and has recently agreed to set up a group led by Ron Kawalilak, Director Strategic Development and Corporate Affairs, to develop a strategy for improved information management in CALM.

For some years now, FloraBase has been an outstanding success in making information readily available about our flora, essentially by 'mobilising' information held in the Herbarium collection. In recent years, natural resource management groups have been calling on CALM to collate and make available to them our knowledge of the State's biodiversity; and ready

availability and rapid transmission of geographic and resource information are increasingly important features of our response to major incidents such as wildfires.

In developing an information management strategy for the future, there are technical, structural and cultural issues to be addressed. The technical issues are, in many ways, relatively easy to address. Structurally, we have information gathered and stored in numerous systems and locations across the Department, and improved integration is necessary. Culturally, our people need to adopt a philosophy of maximising the integration and ready availability of information, so that staff throughout the Department and the many people in other agencies, industry and the community who need to use our information can have ready access to it.

I would welcome debate and ideas from CALM staff on the information strategy that we should adopt for the future.

Keiran McNamara, Executive Director



Minister endorses fire review

ENVIRONMENT Minister, Judy Edwards, has endorsed a review of CALM's fire management in the south-west.

Dr Edwards sought the review by the Environmental Protection Authority as part of a staged process to look at CALM's fire management responsibilities and objectives.

Other parts of the process included an internal CALM review, a scientific and community forum, and a revised departmental fire management policy.

"CALM has a range of obligations in respect to fire management on lands for which it is responsible," she said.

"This particularly applies to community safety, conserving and protecting biodiversity values, protecting built assets and maintaining the health of natural ecosystems.

"Fire management is perhaps the single most controversial aspect of the Department's operations because of a wide range of views held by a broad spectrum of the community on the role of fire in ecosystems, particularly prescribed burning.

"The Government acknowledges that although CALM is not a 'fire service' as such, it is a major player in protecting communities throughout the south-west from the impacts of potentially destructive bushfires.

"Part of the protection mechanisms is reducing the build up of fuel loads by prescribed burning throughout the forested

Dr Edwards said in adopting the EPA's

advice, and reviewing submissions from stakeholders on the recommendations, there were four areas that would be further explored:

- · current approaches to fire risk reduction and risk management in new and existing developments in south-west communities, particularly in the rural-urban areas;
- · fire management regimes, including prescribed burning, in the tingle and red flowering gum areas around Walpole;
- · the establishment of scientific reference areas in fire sensitive forest ecosystems;
- a more formal public involvement process as part of the development of CALM's three-year indicative prescribed burning

Conservation News August 2005

Published by Department of Conservation and Land Management Strategic Development and Corporate Affairs, Cygnet Hall, (cnr) Mounts Bay Road & Hackett Drive, CRAWLEY, Western Australia 6009

Managing Editor: Caris Bailey Journalist: Tracy Peacock

Contributing Editor: Rhianna Mooney Design and Production: Gooitzen van der

Telephone: (08) 9389 8644 Facsimile: (08) 9389 8296

Talking up wandoo decline

THE Wandoo Recovery Group (WRG) recently hosted a community forum focusing on wandoo decline and what is being done to understand and manage the problem.

Held at Technology Park, the forum attracted about 70 people from the south-west.

Participants included CALM scientists and staff plus representatives from the farming community, universities, State agencies and local governments.

Environment and Science Minister, Judy Edwards, officially opened the forum and acknowledged wandoo's ecological value and considerable economic contribution to the State's development.

In outlining the objectives and achievements of the WRG, Dr Edwards stressed the importance of community involvement.

Consultant Frank Batini presented a review of possible causes for decline, including the interaction of a number of abiotic and biotic factors.

University of Western Australia School of Plant Biology's Dr Pieter Poot spoke about research studies examining wandoo's

By Liz Manning

response to certain environmental stresses and identifying links between canopy foliage loss and the influence of insects and fungal pathogens. Open, interactive discussion debated current information and the need for continued research.

A follow-up Wandoo Science Workshop was held to set directions and priorities for future research.

Scientists, academic staff and researchers from CALM and other government agencies, tertiary institutions and stakeholder groups participated in the one-day workshop.

The open forum session, chaired by CALM Regional Services Director, Alan Walker, focused on key scientific and operational research needs as well as identifying gaps in existing knowledge.

The outcomes of the workshop will enable the WRG to develop a research plan that determines direction, priorities and funding arrangements.



UWA School of Plant Biology Head, Professor Hans Lambers (left), UWA PhD student, Eleftheria Dalmaris, CALM Regional Services Director, Alan Walker, UWA School of Plant Biology Research Fellow, Dr Erik Veneklaas, York LCDC, Bruce McGregor, WRG Executive Officer, Liz Manning, Max Trenorden (MLA), Environment Minister, Judy Edwards, UWA School of Plant Biology's Dr Pieter Poot, CALM Swan Region Regional Manager and WRG Chair, Alan Sands, Office of the Minister for the Environment and Science Policy and Liaison Officer, Murray Carter, at the workshop recently conducted by the Wandoo Recovery Group.

Walk to provide new access opportunities



CALM Parks and Reserves Officer, Neil Taylor (front left), CNTA Media and Promotions Officer, Jodie Anstee, John Byatt, CALM Landscape Architect, Lisa Archer. Disability Services Commission, Jamie Ashton (back left), Dunsborough Chamber of Commerce, Anne Willis, Friends of the Cape to Cape Track, Tom Tuffin, Busselton Shire Councillor, Jane Holland, and Rance Driscoll.

ACCESS for people with disabilities is being planned for part of the Cape to Cape Walk Track, which runs between Cape Naturaliste and Cape Leeuwin.

A consultative committee is working on the project with access earmarked for a section between Cape Naturaliste Lighthouse and Sugarloaf Rock.

The committee comprises representatives from CALM, Friends of the Cape to Cape Walk Track, Cape Naturaliste Tourism Association, Disability Services Commission, South West Development Commission, Dunsborough Chamber of Commerce, Shire of Busselton and local

CALM Parks and Reserves Officer and Committee Chairman, Neil Taylor, said the track was in the early stages of planning and on completion would be a great way for people with disabilities to enjoy views of the spectacular coastline.

"The track will be created with safe, durable materials which will complement the natural surroundings with as little disruption to the environment as possible," he said.

"This section will cover 3.4 km from Cape Naturaliste to Sugarloaf Rock and will be 1.8 m wide to allow for wheelchairs.

"Rest bays, seats and a lookout will give people the opportunity to stop and enjoy some of the most beautiful views of Cape Naturaliste."

Twenty years ago this month. . . August 1985

CALM News

Official newspaper of the Department of Conservation and Land Management

Vol. 1. No. 6. AUGUST 1985

E FORESTERS FACE

re-establishment of the crop after the first harvest. Extensive field trials initiated at Myalup this year are expected to provide the data required to guide future

Research Officer Luisa de Braganca.

According to Luisa other second rotation studies are in progress.

"Experience from South Australia and Victoria shows that burning to dispose of the first crop debris does not benefit the young trees," she said.

"Hot broadcast burns after clearfelling destroy the organic matter and

"Traditionally, roughly prepared land has been burnt to clear unwanted vegetation and slash. The method has proved to be economical and the first

pine crop grew well.
"The first crop had the

Peter pointed out that the rake wind-rowed all the bigger debris and left

his planters had had no problems working over this ground with their spears, and the team is hopeful that further work

In March 1986, a sur-

mentioned for up to ten

"As part of the experiment design, the trial incorporates the use of fertilisers, clover and the advantage of a transpirant retardant,"

said Luisa.

One half of the seedlings was treated with a fine plastic spray on foliage, to help them

conserve moisture.
"It will be interesting to see the results of this trial", said Luisa.
"The application could

easily be made in the nursery at the time of final lift, and the plastic film may make a signifi-cant difference in survival rates, given W.A.'s dry climate.''



LUISA de Braganca and Peter Jenkins examine seedlings on a three-year-old crushed log slash.

Second crop

Early indications are that the ground treated with the giant rotary rake may prove to be the best.

an even layer of light slash behind. Mike confirmed that

Under the general supervision Peter Jenkins of Buss-non Research, Mike Fielden's Harvey gang has planted

with the rake will prove its long-term value.
"It may even be worth a trial on fire breaks," said Peter

vival count will be made in the trial area and progress details of the second crop trees will be

trol plots was particularly difficult, but the men still managed to keep the rows straight and the spacing even — both important for our statistical analysis.
"The men, of course, prefer to work over the clean burnt land, but they see the reasoning "The crushed slash retains the nutrients for the "The organic matter also improves the soil texture helps greatly with the retention of moisture, and suppresses the weeds. "Even after three years there is very little weed competition in these compartments, and I expect the trees to be well

field The study is being undertaken by the Busselton Research team and is under the direction of matter built up over the

"We will have to

W.A.'S pine foresters are facing a new challenge -

change our approach if we want to maintain the productivity of con-tinuous pine crops." The test sites are located in one and three-year-old pine logging slash.

Ground treatments include crushing, raking, burning (past practice) and untreated (control).

> radiata pine in carefully laid out plots.
> "They have done a marvellous job for us," said Peter.

Managed

behind the trials.

new plants.

"Working in the con-

nutrients.

"Nitrogen is lost to the atmosphere, through volatilization. Other nutrients are mineralized and quickly leached out before the young trees have access to them. "The organic matter

plays an important role in nutrient cycling and in the structure of poor sandy

CLAYTON SANDERS grafts radiata pine scions from Victoria onto local stock

Researchers seek the perfect p

THE first new radiata pine seed orchard in 16 years is planned for West Manjimup, and Trevor Butcher and his researchers at Wanneroo hope their design will solve many problems.

The orchard is to be planted at two different sites - one for for males.

Each row of trees within the orchard will be a specific radiata clone with known character-

By selectively cross-

pollinating the various clones the Department will be accurately able to breed for features such as dieback tolerance, or su-

The objective is make available stock with the best genetic character for both dieback prone, and 'safe' areas.

nearly 500 radiata scions have been imported from Victoria and 500 from South Australia. perior growth. The rest will come from WA - bred pines.

The imported scions have been taken from a part of Victoria so far

To stock the orchard

troma pinii — a pine-killing fungus thought to have come from New Zealand, which is prevalent in all the Eastern States except South Aust-Under the skilful hands of Clayton Sanders and his team, the new scions are being grafted onto local stock at the rate of

uninfected by Dothis-

160 a day.

The young pine will be quarantined for at least six months, to ensure no Dothistroma has also been brought in.

The stock for the new seed orchard has been completely tested over one generation for dieback tolerance, and will also grow faster, have finer branches, and is expected to improve

timber production by more than 10 per cent. The first crop of seeds is due in six years.



planters (from left) Stephen Prokopyszn, Fandy HARVEY Birch, Glen Willmott and Des Dann.

SAFETY . .

THE correct use of protective ar saved Forest Worker Michael McLaren from serious injury re-

New on the job at Kirup, Michael was culling small pines with a chain saw.

While walking between trees with the motor running down Michael changed his grip on the saw and slipped on the Slash under foot.

The moving chain ripped into Michael's trousers above the left

Fortunately, the trousers were fitted with chaps specially designed to guard against such an occurrence and Michael suffered no serious

The chaps are made of energy absorbing fibres, similar to that used in bullet-proof vests. Michael has since resumed work

after further instruction from his overseer, but the incident clearly demonstrates the value of using the safety gear supplied by the Department.

Twenty years ago this month. . . August 1985



THE Policy Directorate comprises four Directors and myself, assisted by Directorate Manager.

This group meets every week, usually half a day.

If you consider the vast array of situ tions, challenges and problems represent within one district or region, then multip it by ten, then you might get an impressi of the range of issues discussed at a Dire tors' meeting.

Added to the range of issues is the ran of expertise and interests of the five pri cipals and their varying backgrounds.

This could be a recipe for disaster, and it probably fair to say that the first couple of meetings were not exactly what the Land U Task Force had in mind.

I'm now pleased (and relieved) to be ab to say that Directorate meetings have vastl improved and there is a more professiona corporate attitude to decision making.

The meetings are varied nearly every weel by the addition of invited staff members fo the purpose of briefing the Directors on particular topic or challenge.

In the short term this probably limits the number of policy decisions made, but it is essential for the group to all have a broad appreciation of the backround upon which decisions are made.

In order to ensure continuing communications with the General Manager and his operations group, the General Manager attends most Directorate meetings and alternate meetings are combined with both groups.

There are still hundreds of policy decisions to make, and as I said in the last issue of CALM News, the door is always open for anyone and everyone to contribute to development of policy decision - policies of all kinds are under constant review.

Syd Shea **Executive Director**

SAFETY

THE NANNUP District received the Executive Director's safety award for working 12 months without a lost time injury accident on Friday, August

The award was made

The award was made by the Minister assisting the Minister for Conservation and Land Management, Dave Evans.

Mr Evans said for 73 people to work a full year without losing a day because of injury was no mean feat.

cause of injury was no mean feat.

This was particularly so considering the work environment could be hostile and hazardous.

Mr Evans said that while each individual might perform different tasks and functions, each employee contributed towards a common goal.

He said the common denominator was a commitment to each other and to safe working practices.

other and to sale work practices.
"I know that you have a good safety programme that was introduced al-most 20 years ago, and that it has been added to and improved," Mr Ev-

imate that in 1983-84 the

Now, nearly 20 years after the programme was introduced, safety practitioners know that the humane and the economic elements in a safety programme are inseparable.

It was clear that substandard and unsafe working conditions were uneconomic, and that improvement in working uneconomic, and that im-provement in working conditions and safety standards would also im-prove the efficiency of workers and raise their morale. morale. Mr Evans said while it

Mr Evans said while it was not possible to measure the value of the intangible humanitarian benefits of a safety programme, it was possible to quantify some of the monetary savings.

He said it had been worked out that if the Department's safety performance for 1983-84 had been the same as in 1966-67 then more than 2000 additional working days would have been lost be-

Department employed more than 200 people who were paid by the savings achieved on an effective safety pro-



DAVE EVANS addreses Nannup employees during the safety presentation. Seated are (from left) Steven Quain, Bruce Harvey, Syd Shea, David Meehan, Bill Stretch (MLC Lower Central Province)

Irony of Ranger's verse by JOHN HUNTER

FOR those who remember and those who should beware — four years ago the National Parks ranger corp lost a fine colleague in the line of duty.

Len left his home in Cape Arid National Park late one afternoon to do a short beach patrol on his motor bike — he did not return.

THE National Tree Programme through Greening Australia (WA) has given grants worth \$56,000 for revegetation in the last month.

The recipients are from Nullagine in the north to Esperance in the south.

Of all the anglections

the south.

This year the G.A./
N.T.P. Committee decided to make a piority of the farming communities involvement in revegetation.

The response was over-whelming with more applications received than the funds could meet.

However, \$42,000 went to farmers who were

on Friday, August 8.

Mr Davies said the organisers, Greening Australia (WA), had initiated the awards to encourage the community to become involved in prentient gashest for the average of the prentient of the

on their land.

Of all the applications from the farming community, the most notable was a group entry from Jerramungup, who together with the Agriculture Department had been attempting to redress the balance on badly cleared land.

Minister launches

1985 Tree Awards

cessful, but this past summer brought with it extensive bushfires, which destroyed most of their efforts. The farmers are not deterred and with help from the N.T.P. grants began planting again this winter.

THE Minister for Conservation and Land Management,
Ron Davies, launched the John
Tonkin Tree Award for 1985
on Friday, August 8.

The launching of the John Tonkin Tree
Award was made at a ceremony at the
Herdaman Lake Wildlife Centre.
The Awards provide for local government, student, industry, farmer, families and community groups to nominate

Award was made at a ceremony at the Herdsman Lake Wildlife Centre.

The Awards provide for local government, student, industry, farmer, families and community groups to nominate projects.

There were also categories for the development of innovations for tree planting and protection.

The categories reflect the diversity of commitment by the community to protect and enhance the environment, whether it be private land on the national estate.

Mr Davies praised Greening Australia (WA) for its on-going programmes to enhance the public's awareness of the nation and environment of the made particular reference to the organisations administering of Community Employment Programme schemes in WA which have a current value of the properties of the programment of the progra



AFFORESTATION'S ARTFUL AID WOOD NYMPHS: "THANK YOU SO MUCH. THIS'LL MAKE A BEAUTIFUL HOME FOR US IN YEARS TO COME."

Journal proves

The Department's journ Landscope, has been enthusiastically received to the degree that the Distributions Officer Robyn Weir is "flat out" adding names to the list for the next issue.

Staff and the general public have reported verbally and in letters to the Editor, that the quality of photographs, range of topics and the professional approach to layout and design is indicproviding for all its publics.

It was a year ago that a committee comprising Alan Hill, John Hunter, Marion Lewis, Malcolm Taylor and Chairman Dr John Sharpham first discussed the formula for producing the magazine.

As the "shop window" for the Department of Conservation and Land Management and a successful replacement for Forest Focus and SWANS journals, Landscope Vol. 1 June 1985 has generously embraced the topic of Land Conservation issues which involve approach to layout and design is indicative of the Department's objectives in Forest Reserves and the general management procedures.

LANE-POOLERESE By ROGER HEARN

THE WRITING of a draft management plan for the Lane-Poole Reserve is now well under way after about 18 months of formulating ideas and getting public input.

Building on earlier with a purpose equivalent solid ground work laid to that of a National down by the Northern Park

rection for management and succeeded in getting the planning group established to prepare formal management plans for the area.

This group comprises Owen Nichols (on loan from Alcoa), Barry Muir (CALM Planning Group,

They are now in the process of sorting through and extracting materials from these, weighing up arguments, making decisions and writing the draft plan.

The next phase will be



Groups unite to help wallabies Healthy Parks

CALM has once again teamed up with the Cape Conservation Group, World Wide Fund for Nature Australia and the Exmouth community to help conserve fauna on the North West Cape.

This time the focus shifted from marine turtles to black-footed rock-wallabies, which are listed as vulnerable to extinction.

The July school holidays saw the second of three field surveys, where volunteers searched gorges in the Cape Range National Park for evidence of these shy creatures and spotlighted at night to count and record their behaviour.

CALM Exmouth District staff and holidaying staff from Kensington, Woodvale and The Hills Forest Discovery Centre volunteered to assist with the program.

Staff who took part in the surveys were: Mia Morley (Woodvale); Marie Morisey (The Hills Forest); Rebecca Coyle (Kensington); Raquel Carter (Exmouth); Ashley Millar (Exmouth); Jennie Cary (Exmouth); Kim Onton (Exmouth); Craig Kitson (Exmouth); Nicky Herriot (Exmouth); and Kate Macgregor (Exmouth).

The Cape Range rock-wallabies comprise one of only six populations that have survived in WA.

Their decline is largely due to predation by introduced foxes and cats and loss of suitable habitat.

The small, scattered groups that have survived in the gorges and rocky outcrops of Cape Range also have to compete with feral goats for shelter and green feed.

Previous studies of rock-wallabies in the region have mostly concentrated on the Yardie Creek population.

The current work, led by CALM Principal Research Scientist, Dr David Pearson, is trying to establish where rock-wallabies are living elsewhere in Cape Range and estimate their numbers.

"The study is valuable because it will establish a benchmark distribution for rock-wallaby populations in Cape Range, allowing us to assess the effectiveness of baiting operations," David said.

"We are also recording goat activity and presence to determine where goats and rock-wallabies are in competition with each other."

By Kate Macgregor

Another benefit of the study is that anyone with an interest in rock-wallabies has a chance to get involved.

The next field study is scheduled for 29 August – 3 September. For details contact Kate Macgregor on 9949 1226 or CALM's Exmouth District Office on 9949 1676.



CALM Exmouth District Manager, Jennie Cary, and Principal Research Scientist, David Pearson, spotlighting for rockwallabies in Cape Range National Park. Photo - Kate Macgregor

Healthy People

Did you know?

The foundation of CALM's Healthy Parks, Healthy People initiative is based on international evidence that shows a strong link between contact with nature and human health. This month's column looks at these links. Further references and evidence can be found on www.naturebase.net

Contact with nature results in better performance in attention demanding tasks

Contact with nature reduces mental fatigue and improves concentration, attention and productivity. University students were given a test and scores were compared between students who had a view of nature to those who did not. The students who had a view of nature scored significantly better on the test than those with non-natural views. The postulated reason for the effect of nature on improved attention is that the act of viewing nature requires undirected or effortless attention which is undemanding and restores mental capabilities. In addition, the general human response to nature involves feelings of contentment and a diminution of negative emotions, such as anxiety, irritability and stress, and impacts positively on psychological state and mental clarity.

Improves community cohesion, pride and level of social capital

Neighbourhoods with access to nature generally have a lower incidence of crime, violence, graffiti and anti-social behaviour. These factors are associated with self-reported higher life satisfaction and increased community cohesion, identification and pride. Community cohesion (or the level of social capital) resulting from opportunities to socialise with other members of the community significantly impacts on health and well-being. People with extensive social networks or high social capital have a lower risk of illness and death and increased life expectancy compared to people who are socially isolated.

Benefits children with attention deficit/hyperactivity disorder (ADHD)

Natural play settings, or natural surroundings, appear to reduce the severity of symptoms of attention deficit/ hyperactivity disorder and lower the amount of medication required to favourably modify behaviour. A nationwide study conducted in the United States showed that the after effects of activities conducted in natural environments resulted in significantly reduced ADHD symptoms compared to similar activities conducted in other settings. The findings were consistent across gender, income groups, community types and geographic regions.

Is valued by everyone

The importance of the natural environment is common in all cultures and nationalities. With respect to spiritual inspiration, a survey in the US found that 45 per cent of respondents considered wilderness either 'extremely important' or 'very important' for this endeavour. A further 56 per cent of respondents stated that just knowing nature exists was 'very important' or 'extremely important' to their well-being.

Nature has the capacity to bring people in contact with one another and increase social capital and may be an important means of facilitating cooperation between different groups of people and reducing racial barriers. Contact with nature may also benefit migrants by increasing the sense of identity and ownership of their adopted country, foster a sense of integration rather than isolation, provide restoration and relief from daily challenges and provide empowerment, skill development and opportunities to participate in caring for the environment of their adopted country.



CALM farewells John Blyth

CALM recently farewelled bird expert and Acting Manager of CALM's Threatened Species and Communities Unit, John Blyth, after some 20 years with the Department. Colleague Val English writes about his long and distinguished career.

John Blyth left school after completing his leaving certificate and became a farmer in Sunbury, Victoria.

After 10 years he decided that farming was not his forte, and completed a degree in zoology, with honours in a project on spiders. He then worked at the Museum of Victoria on freshwater invertebrates in upland rivers for 12 years before applying for a job with CALM in 1985.

John started work as Scientific Advisor to Barry Wilson (the then Director of Nature Conservation), working alongside Keiran McNamara who joined the Department a few weeks after John.

He worked on a broad range of issues such as the development alongside Thomson's Lake, and protection of the Lake Muir reserve from peat mining. John also chaired the Roadside Conservation Committee for several years during this time.

In 1992, Andrew Burbidge set up the WA Threatened Species and Communities Unit (WATSCU), located at Woodvale. This was set up to coordinate the recovery of the State's most threatened species and communities.

Andrew asked John if he would like to join the group, and John began work on setting up procedures to identify and conserve threatened ecological communities (TECs). At that time, there were few, if any, methods in place anywhere in Australia that could be used to guide these processes for TECs.

John then spent several years overseeing the development and application of these procedures, including their inclusion in a major new draft policy entitled 'conserving threatened species and ecological

communities' and a published paper in Pacific Conservation Biology, which he co-authored.

In 2001, Andrew Burbidge who had been Director of the Threatened Species and Communities Unit since 1992, became Deputy Director for Biodiversity Conservation. John then became Acting Manager of WATSCU, and continued in this position after Andrew retired in 2002.

John's great love is threatened birds, and he has been very actively involved with Birds Australia since 1988. He was also a key figure in the recovery team for Carnaby's cockatoo, which he has chaired since 2002.

In the past few years John has been closely involved in the recovery team for the root mat community of the Yanchep caves. In particular, John was a key figure in a successful application for more than \$1 million in funding to

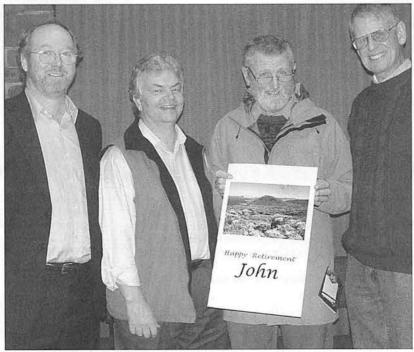
assist in the recovery work on this critically endangered community.

Recently, John has spent a lot of time dealing with issues surrounding the implications of many development proposals for threatened species and communities. John was instrumental in successful negotiations with a company mining chert near Moora.

As a consequence of these negotiations, a large area of an endangered TEC and numerous rare flora that occur at the site has been relinquished from a mining lease and has become a nature reserve.

John is well known for his amiable nature and for his very broad knowledge, and dedication to, conservation issues.

He will be returning to CALM in his retirement, to spend a few days a week working on the things that he most enjoys, including threatened birds and invertebrates.



John Blyth (third from left) at his farewell flanked by CALM Executive Director, Keiran McNamara, CALM Acting Nature Conservation Director, Gordon Wyre, and Andrew Burbidge. Photo - David Gough

Watershed for Leeuwin-Naturaliste

A 30-year vision moved closer to reality when the documentation to consolidate the Leeuwin-Naturaliste National Park was recently presented to the Department for Planning and Infrastructure.

The project dates back to 1972 when the Environmental Protection Authority established a Conservation Through Reserves Committee to evaluate and review the need for a system of conservation reserves throughout the State.

In its first report in 1974 the committee recommended that the suite of reserves between Cape Naturaliste and Cape Leeuwin be consolidated into a single Class A national park.

The recommendation was accepted by the EPA and then State Cabinet and the framework for the Leeuwin-Naturaliste National Park as we know it today came into being.

Because of the previous difficulty in adding

areas of land to Class A reserves, the park developed as a series of separate reserves, to the point where it is now made up of 36 individual parcels.

The 1989 management plan revived the 1974 recommendation. Although many attempts had been made to complete the task of consolidating the park, until now there had been little progress.

CALM's former Director of Corporate Services, Alex Errington, returned on contract to tackle this and other long-outstanding land tenure proposals. Alex has advanced the project to the point where the consolidation can now be put in place.

As part of this project, at least 18 proposed additions will be incorporated into the park.

This will leave just five further proposed additions that require additional work before they can be included. However, the bulk of the vision will be realised in the near future.



CALM contractor, Alex Errington, (right) hands over the Leeuwin-Naturaliste documentation to the Department for Planning and Infrastructure's South West Regional Manager, Ron Pumphrey. The handover brought the 30-year project one step closer to completion.

Photo – Sue McKenna

Conservation briefs

CALM staff take to the streets

About 30 CALM staff and family members took part in this year's City to Surf fun run on Sunday 28 August.

CALM Corporate Health Officer, Karen Koomen, said the staff who participated in the 12 km run represented a cross-section of the Department coming from Kensington, Woodvale, Swan, Bunbury and Margaret River.

They wore specially-designed t-shirts and singlets featuring the Healthy Parks, Healthy People and CALM logos.

The City to Surf fun run is organised by Activ Foundation and proceeds support people in Western Australia with intellectual disability, and their families.

Wildfire provides learning opportunities for schools

THE aftermath of January's fire in the Perth hills is providing an excellent learning ground about the impact of fire on the environment and its importance to biodiversity.

Lessons are learnt about the management of the fire and now, as the environmental impact is being assessed, there is an opportunity for teachers to learn about the history of fire, its role in promoting biodiversity and the effect wildfires

By Paula Sothern

have on our drinking water catchments.

CALM's Senior Project Officer for EcoEducation, Liz Moore, said the program, which was made possible by funding from CALM's Sustainable Forest Management Division, included a series of professional development (PD) days for teachers, resources for



CALM's Rob Towers, (centre) examines the aftermath of the Perth hills fire with Jeff Doust from the Water Corporation and Fettes Falconer from Sevenoaks Senior College. Photo – Liz Moore

classroom use and Fire for Life excursions.

"The PD offers a tour of the Perth hills area affected by the January wildfire and a fascinating insight into fire behaviour by experts from CALM and the Water Corporation," Liz said.

"The day begins at The Hills Forest Discovery Centre, near Mundaring, where Rick Sneeuwjagt and Rob Towers, from CALM Fire Management Services, describe the devastating impact of wildfire and how prescribed burning can be used as a tool to protect life and property, promote biodiversity and for sustainable forest management.

"Jeff Doust, from the Water Corporation, then explains how fire can lead to soil erosion and reduced water quality and Michael Phillips, the Senior Ranger in the Perth Hills, summarises how geographic information systems and satellite communication are used to combat wildfires."

The afternoon bus tour of the areas affected by the Perth hills wildfire is led by CALM's Kevin Pollock, the District Fire Coordinator, to demonstrate the impact of this massive event.

The tour also shows how the forest starts to recover, with green 'sprouters' heralding new life providing a stark contrast to a blackened backdrop.

PDs will be run again next year for teachers of all learning areas. To book a PD or excursion or for more information, call The Hills Discovery Centre on 9295 6149 or visit NatureBase's 'For Schools' section at www.naturebase.net/schools.

Perth Observatory now a heritage star

PERTH Observatory recently had a reason to celebrate.

No, it hadn't discovered life on Mars or a new comet, but it had been placed on the State Register of Heritage Places.

The announcement was made by Heritage Minister Fran Logan last month.

"The Perth Observatory, situated in Bickley, is Australia's only remaining State-run astronomical observatory and is one of the most important scientific research and educational institutions in WA.

WA Government Astronomer and Perth Observatory Director, Jamie Biggs, described the announcement as significant because it conferred 'some degree of preservation on the Observatory and its operation'.

"Perth Observatory is Australia's oldest continuously operating observatory and being placed on the State Register of Heritage Places also reflects very well on our staff and supporters who have faced some difficult times when the observatory was threatened with closure," Jamie said.

"Part of the heritage listing pertains to 'social value' and many in the WA community support the observatory's activities for the services it provides and not just for parochial reasons.

"Perth Observatory was established in 1896, colonial times, so it's a living link with the colonial past and the growth of science in the State and Australia."

The new Perth Observatory was built for \$600,000 and was opened by Premier David Brand in 1966, 70 years and one day after the original observatory was opened by Sir John Forrest in 1896 at a cost of 7,000 pounds.

The Bickley site was considered an ideal location for an observatory away from the interference of city lights and urban pollution.

The observatory has many significant pieces of astronomical technology from the late 19th century to the present, much of which is on display for public viewing.

The new season of star viewing nights at the observatory starts at the end of September, plus groups of 20 or more can book a daytime guided tour on 9293 8255.



Heritage Minister Fran Logan and Perth Obervatory Director
Dr Jamie Biggs at the official announcement that the Perth Observatory
had been places on the State Heritage Register.
Photo – Nicole Millane

Staff changes . . . Staff changes . . . Staff changes . . .

Contract

Martin Hadley, Technical Officer, Kununurra Work Centre; Marita Finnegan, Information Officer, Information Management Branch, Kensington; Bonnie Zhuo, Officer, Information Management Branch, Kensington; Larry Ford, Technical Officer, Kununurra Work Centre; Craig Kitson, Mobile Ranger, Exmouth District; Ranae Boon, Clerical Officer, Geraldton District; Rachel Meissner, Research Scientist, Woodvale Research Centre; Leon Jacky, Technical Officer, Kununurra Work Centre; Steven Dillon, Technical Officer, Woodvale Research Centre; Adrienne Markey, Research Scientist, Woodvale Research Centre; Verity Steptoe, Field Officer, Blackwood District.

Promotion

Karina Knight, Collections Manager, WA Herbarium; Greg Broomhall, Regional Fire Coordinator, Albany District; Mary Colling, Management Accounting Officer, Finance Management Branch.

Permanent

Jason Foster, Regional Leader, Bunbury; Nathan Eaton, GIS Officer, Information Management Branch, Kensington; Jacquie Baxter, Visitor Services and Interpretation Officer, Manjimup; Gavin Wornes, District Fire Coordinator, Esperance District.

Jacqueline O'Toole, Finance and Administration Coordinator, Parks Policy and Services.

Neil Scott, Ranger-in-charge, Two Peoples Bay Nature Reserve, Albany District. Secondment

Retired

John Schuts, from Blackwood District, Busselton to Assistant Operations Officer, Softwood Business Unit, Nannup.

Wolf Tiedemann, District Sustainable Forest Management Coordinator, Donnelly District; Aminya Ennis, Regional Leader, Wheatbelt Region; Jennifer Paterson, Clerical Officer, Swan Coastal District, Wanneroo.

Temporary deployment

Nick Phillips, Project Officer, Nature Protection Branch, Kensington; Yvette Caruso, Technical Officer, Woodvale Research Centre; Cheryl Ehlers, Field Officer, Frankland District.

Resigned

Bradley Rowe, Ranger, Millstream-Chichester National Park; Steven King, Operations Officer, Regional Parks, Fremantle; Tammy Hanson, Interpretation Communication Officer, Regional Parks, Fremantle.

Contract ceased

Susan Harris, Interpretation Officer, Parks Policy and Services, Kensington; Malcolm Trudgen, Senior Research Scientist, WA Herbarium; Fiona Kirkpatrick, Field Officer, Nannup; Gary McMahon, South West Regional Biodiversity Officer, Bunbury.