

April 2007

Minister Templeman busy with new duties

WITHIN days of being sworn in as Environment Minister, David Templeman met with DEC staff while he was in Bunbury for Regional Cabinet.

He toured DEC's South West Regional Office and presented National Medals and Clasps for fire service to 52 DEC and Forest Products Commission staff from the South West Region as part of his first official function as our new Minister.

Mr Templeman was sworn in as Minister for the Environment; Climate Change; Peel on Friday 2 March. He had been Minister for Community Development, Seniors and Volunteering, Youth and Minister assisting the Minister for Planning and Infrastructure since February 2006.

Minister Templeman said he looked forward to his role promoting and protecting WA's environment.

"We cannot afford to take our beautiful State, and indeed our planet, for granted," he said.

"We are now being presented with the responsibility and opportunity to respond to the climate change challenge. We all have a role to play – Government, business, communities, families and individuals, in meeting this challenge and working together to arrest the dramatic effects and impacts of a changing climate.

"The Carpenter Government

accepts this challenge on behalf of all Western Australians. I am proud to lead our State's continuing response to climate change and I am encouraged by the enthusiasm that is already so evident in our community to tackle this challenge. I am excited about promoting and protecting our unique environment and preserving our lifestyle."

Mr Templeman was born in Northam and moved to Perth in 1983 to study for a Teaching Diploma at Claremont Teachers College, majoring in Speech and Drama.

In 1994 he was elected to the Mandurah City Council, was re-elected in 1997 and was Deputy Mayor until his election to Parliament in February 2001. He was re-elected for his second term as Member for Mandurah in February 2005.

During his first term of Parliament Mr Templeman's Parliamentary duties included Acting Speaker of the Legislative Assembly and Chairman of the Community Development and Justice Standing Committee.

At the start of his second term, he was appointed as Government Whip for the Legislative Assembly and served as a Committee Member of the Economics and Industry Committee.



Bunbury Regional Manager Bob Chandler (left) and Senior Fire Operations Officer Terry Maher (right) received recognition for their firefighting efforts from Environment Minister David Templeman (centre). Photo – Nigel Higgs

Awards for firefighters

MORE than 1400 years of accumulated dedicated service was recognised in March when DEC and Forest Products Commission staff were honoured for their dedication to protecting Western Australia from the devastation of bushfires.

Fifty-two staff from DEC's South West Region and Forest Products Commission staff working in the south-west were awarded the national service honour. Environment Minister David Templeman presented medals to 17 staff for giving 15 years' service, another 31 staff received a medal clasp for their subsequent 10 years' fire service and four staff received second clasps for a further 10 years of service totalling 35 years each.

A long-serving DEC staff member, Brian Brown, known affectionately as 'Bomber', was recognised posthumously. His widow and children accepted a second clasp, recognising more than 35 years' service, on Brian's behalf.

Bunbury Regional Manager Bob Chandler said the staff were worthy recipients of recognition.

"These staff show an enormous commitment and dedication in spending this amount of time on the job," Bob said.

"Summer after summer they are away from home fighting fires.

"No one does this for the recognition but it's certainly nice to have the medal as a way of showing them their work is important."

Bob said the awards were particularly timely, considering the mammoth firefighting effort required for the Dwellingup and Porongurup fires early this year.

"We've had another big fire season, making it several big fire seasons in a row," he said.

"Their work in fighting these fires is multifaceted. Foremost, they are saving people's homes, properties and even their lives – I can't think of anything more worthwhile for a public servant to do.

"And they are also stopping wildfires from ravaging our natural areas.

"The fires don't stop of their own accord – they stop when these men and women stand in their path and stop them."

Discover Western Australia's national and marine parks

By Michelle Tilbrook

VISITORS to WA can now discover more than 100 national, marine and regional parks throughout the State with DEC's *National, marine and regional parks in Western Australia – A visitor's guide to the State*.

The free guide provides easy-to-access information to help people plan their visits to some of the State's most spectacular landscapes.

DEC's Acting Director of Parks and Visitor Services Peter Sharp said the

continued on page 2

Clean Up Australia Day sets a record

THIS year's Clean Up Australia Day was the biggest ever recorded in WA.

DEC runs the WA branch of the nation-wide clean up on behalf of the non-profit organisation Clean Up Australia.

An army of nearly 100,000 volunteers from across the State joined the initiative, spending a combined 62,206 hours at nearly 600 sites.

Together, they collected about 700 tonnes of rubbish.

DEC's Keep Australia Beautiful Community Education Coordinator Emma Donnelly said this year's initiative also involved a climate change pledge, under which volunteers could sign up to reduce their own household greenhouse gas emissions by 25 per cent per year by 2010.

Pledges can be made at www.cleanup.org.au.

While impressed with the excellent turnout, Emma said it was disappointing that six out of the 10 most common types of rubbish found on Clean Up Australia Day could have been recycled.

"We have continued to find a large amount of plastic bottles and beverage containers on site," she said.

"Cigarette butts were also a prevalent item on sites."

Emma said improving recycling rates would help each Australian household reduce the almost one tonne (0.9 tonne) of greenhouse gas emissions they produce each year by sending waste to landfill.

Nation-wide, more than 7000 clean up sites were registered and more than 8000 tonnes of rubbish were collected.



DEC Community Education branch staff assisted with the packing of about 800 kits and bags for Clean Up Australia Day 2007.

Working Together

There has been a lot of focus in the media and in Parliament recently, and of course in Esperance, on the elevated levels of lead that have been found at Esperance. The focus has particularly been on concerns about effects on public health and the environment.

This is a very serious issue and one that is now being investigated by a Parliamentary committee. The Department will be providing information to the committee and assisting it in every way we can.

Departmental staff are continuing investigations of the extent of lead contamination, providing information to the Esperance community, and investigating whether offences have occurred under the Environmental Protection Act.

I am also commissioning an independent review of the Department's regulatory and inspection processes for premises and operations that we license under the Environmental Protection Act, to ensure that we operate according to best practice standards, so that we are better placed to detect problems and act on them. In particular our inspection regime and protocols will be examined, as will the most appropriate mix of roles between regionally based and specialist central branch staff.

Dealing with this incident has required a team approach bringing together regional and central staff with expertise in a variety of fields including wildlife, pollution, regulation, investigations, media and communications, as well as support areas such as geographic information systems. DEC is also working closely with the other agencies involved, including the Department of Health and the Shire of Esperance. It is heartening to see how all groups have come together with enthusiasm and a strong spirit of cooperation.

Our priority is to ensure the lead problem is fully investigated and effectively dealt with, so that human health and the environment are protected. Beyond that, it is also important that we learn from what has happened so we can prevent similar incidences in the future.

Keiran McNamara, Director General



Land for Wildlife turns 10



(Left to right) Sue and Paul Kelly, Keiran McNamara and Penny Hussey celebrate Land for Wildlife's 10th birthday.

LAND for Wildlife, a cornerstone program in DEC's off-reserve conservation initiatives, turns 10 this year.

The milestone was marked by a February gathering of some of the many volunteer Land for Wildlife landowners, Departmental team members and others who have been involved in the program since it was officially launched in February 1997.

For Land for Wildlife Senior Project Officer Penny Hussey, who has been with the program since its inception, the event was a chance to say thank you on behalf of her team to all those who have been involved with the program over the past decade.

There are currently 1586 private landholdings being voluntarily managed for wildlife conservation through Land for Wildlife.

The program provides support to landowners through field days, displays, publications, talks and visits to private properties and schools to provide planning and implementation advice.

Penny described Land for Wildlife as a magnificent program to work for and congratulated her team who had become friends as well as colleagues.

She also extended her thanks to the landowners.

"It's a privilege to work with these people, who have provided many inspiring stories of good land management," she said.

By Joanna Moore

A selection of these stories can be found in *With Wildlife in Mind – Ten Years of Land for Wildlife in Western Australia*, which was launched at the event.

The publication also includes a summary of the program and its achievements and profiles Land for Wildlife officers and landowners.

Paul and Sue Kelly, the first 'Land for Wildlifers', also spoke at the event and expressed their gratitude for the support received through the program.

DEC Director General Keiran McNamara congratulated Penny and her team for their efforts and success in encouraging volunteer conservation action, and commended the significant recognition and awards the program had attracted.

Director of Nature Conservation Gordon Wyre closed the event by acknowledging Penny's 12 years of dedicated and driven work on the program, starting when it was just an idea.

"Without Penny we wouldn't be here today celebrating 10 years of Land for Wildlife," he said.

"This program also wouldn't be possible without the Land for Wildlife landowners, who are people of foresight and vision and, as custodians of the land, are looking far into the future."

from page 1

handy glove box-sized guide outlined an endless choice of activities for visitors to enjoy.

"From walking the Bibbulmun Track, one of the world's greatest trails, to viewing dolphins at Monkey Mia, star gazing at the Perth Observatory, sleeping under a canopy of stars in the outback or exploring the gorges of Karijini National Park, there is something for everyone," he said.

"WA's unique landscapes are some of the most stunning on Earth and are protected by a world-class parks system."

DEC manages more than 26 million hectares of national, marine, conservation and regional parks, as well as State forests, timber reserves and nature reserves, which host more than 11 million visits each year.

Readers can also find useful environmental and safety tips and helpful contacts as well as information on pets in parks in the guide.

The guide is available through all DEC offices and visitor centres throughout the State, as well as selected tourist and retail outlets.

Environment and Conservation News April 2007

Published by the Department of Environment and Conservation's Strategic Development and Corporate Affairs Division, Cygnet Hall, (cnr) Mounts Bay Road and Hackett Drive, CRAWLEY, Western Australia 6009

Managing Editor: Rhianna King
Contributing Editors: Samille Mitchell and Joanna Moore

Design and Production: Natalie Jolakoski
Telephone: (08) 9389 8644
Facsimile: (08) 9389 8296

Scholarship to study Bunbury dolphins



Holly Smith will study bottlenose dolphins in Bunbury in a three-year research project.

DEC project officer Holly Smith has received a \$27,000 PhD scholarship to help study bottlenose dolphins in Bunbury in a three-year research project.

Holly received the State Government grant to enable her to embark on the study under the supervision of Murdoch University Research Leadership Fellow Dr Lars Bejder and Professor Stuart Bradley in collaboration with Bunbury's not-for-profit Dolphin Discovery Centre and DEC local industry partners.

Holly said the joint State Government and Murdoch study would focus on examining the composition of Bunbury's bottlenose dolphin population and their preference for different habitat types.

"I'll be looking at the composition of the population – the ratio of males to females and their age classes as well as examining how they use different habitat types," she said.

"We'll survey the population through photo identification and categorise the habitat using remote sensing techniques.

"This will allow us to answer questions like what influences the seasonal movements of the population – is it water temperature, depth, fish or social interaction?"

"We'll also determine if the size of the

By Samille Mitchell

population is going up or down or remaining stable and we'll have information on what areas are critical to the population so these areas can be managed."

Holly's work will focus on Koombana Bay in Bunbury but could stretch as far north as Mandurah and as far south as Busselton. It will cover waters up to five kilometres from shore.

She says she is very excited about the project.

"I'm really looking forward to it," she said. "Dolphins are really popular subjects so it will be great to gain a better understanding of the population here."

Holly was selected from more than 200 applicants from around the world and will work with two other marine scientists who are PhD candidates from Murdoch University on the South-West Marine Research Program.

The three scientists will look at the dolphin population dynamics, genetics and what the dolphins feed on.

Their research is expected to be internationally significant in terms of helping improve bottlenose dolphin management.

New dolphin calves visit Monkey Mia

VISITORS to Monkey Mia are being charmed by three new additions to the dolphin group which visits the settlement's shores.

The three calves boost the number of dolphins which interact with visitors to 13. The first of the new additions was born on 30 November last year and was named Shiver after a competition in *The West Australian* newspaper.

The second was born on Christmas Day, resulting in the name Yule, while the third, born on 15 January, has been named Startle.

DEC Monkey Mia Reserves Officer Sam Tonkin said the calves were proving a big hit with visitors.

"Everyone's really excited when they see them," Sam said.

"They're just amazed."

The new dolphins are likely to remain with their mothers for three to six years before becoming independent.

The mother of the newest calf has also become the latest addition to the select group of five dolphins which accept fish during shore-based interactions.

She is particularly fussy, accepting only tarwhine fish, and turns up her nose at other fishy offerings.

While she is a little more shy with her new calf, this dolphin continues to frequent the shores with her offspring, much to the delight of adoring humans.

Research suggests new value in mallee crops

MALLEE trees are closer to becoming recognised as a commercially viable crop for Wheatbelt farmers.

This follows recent studies by Verve Energy in which all the above-ground parts of the plant were harvested and converted to saleable products.

The wood was converted to activated carbon, eucalyptus oil was extracted from the leaves and all the residues were used as fuel to generate electricity.

This was all done on an operational scale to test whether commercial operations could be viable.

Final evaluation of the results will not emerge for a few months but DEC Revegetation Systems Unit Manager John Bartle has his fingers crossed.

"It appears that a critical factor will be the quality and value of the activated carbon," John said.

"This material is used in water and air filtration and adds to the list of higher-value products that might be derived from the wood fraction. It will be critical to commercial success and the large-scale adoption of mallee."

From DEC's perspective, the real

value of mallee and other woody crops will be their potential to help control salinity and thereby help reduce the loss of biodiversity in rural areas.

DEC started working with farmers in the early 1990s to develop the potential of mallee tree crops as a way of reducing salinity levels while also providing a source of income to motivate large-scale adoption.

Recent research has shown that mallee can have high water use, thereby reducing the amount of water leaking into groundwater systems. Such a reduction in water leaking can ease salinity.

More than 1000 farmers have planted about 13,000 hectares of mallee trees over the development period.

John says farmers have been enthusiastic supporters of the mallee concept and have been active in exploring the best techniques to manage mallee in harmony with large-scale cropping.

He says mallee crops of about 10,000 hectares within a 75-kilometre radius would be required to support commercial production. Two of the main centres of current mallee planting are about half way there.



Wheatbelt landcare officers examine a mallee stand near Koorda to learn about the crop's economic and environmental benefits. Photo - Dan Huxtable/DEC

Litter reporting now online

DOES it bother you when you see someone throw rubbish out of their car window? Do you wish you could do something about it?

Well, you can. A new high-tech litter-reporting scheme enables people to report littering online.

Keep Australia Beautiful Council WA (KABC) Chairman Mel Hay said KABC had been operating the litter reporting scheme since 1980. Under the scheme, registered people could report littering from vehicles by phoning a hotline or mailing a report card.

"But now litter reporting is online, making it even easier," he said.

"Anyone with access to the internet can now register to be a litter reporter and report offenders online.

"Before online reporting, more than 1000 volunteer litter reporters made around 2000 reports each year, most of which resulted in an infringement notice being sent to the offender.

"The message is simple: if you litter, you're ruining the environment and breaking the law."

Since the scheme was announced in mid-January, there has been a significant increase in both the number of registered reporters and the quantity of littering being reported online.

Mel said more than \$16 million was spent on cleaning up litter each year - an approach that was reactive, unsustainable and would not produce the behavioural changes needed to ensure that littering did not degrade the environment.

"Cigarette butts are the biggest litter contributor in WA, and while we've had an overall increase in litter items, the significant rise in cigarette butts is of great concern," he said.

"I encourage DEC staff to play their part to reduce litter by becoming a registered litter reporter."

For more information about the scheme, or to register to be a litter reporter, visit www.kabc.wa.gov.au or call (08) 6467 5129.

KABC is supported by the DEC.

CleanRun check for vehicles

DEC has tackled greenhouse gases by testing vehicle emissions and conducting a community education campaign under its CleanRun program.

A team of DEC staff tested more than 10,000 vehicles at five sites in late February using a remote sensing device.

They also held a community education day in Kings Park, which attracted more than 300 people.

The education day gave participants the chance to have a free vehicle emission check, a free vehicle health check, a free information kit with vehicle test results and information on improving the performance of the vehicle. Participants also received information on

the CleanRun program and how to become involved in improving air quality. They also went into the draw to win a new bike.

CleanRun Program Manager James Forrest said vehicle emissions were detected by measuring exhaust through a light beam which is absorbed by pollutants in the exhaust.

"A sensor measures the amount of light absorbed to determine the amount of pollutants a vehicle discharges," he said.

"Drivers are given a good, fair or poor reading on a sign as they drive past."

Testing occurred on Harborne Street in Wembley, Oats Street in Carlisle, Marine Parade in Cottesloe, Prindiville Drive in Wangara and West Coast Drive in Sorrento.

The emission testing followed a test of in-service diesel vehicles in September last year when 167 diesel vehicles were tested over 30 days.

The vehicles tested included 95 diesel and nine biodiesel government Public Transport Authority buses, 30 diesel school buses, eight privately owned diesel charter buses and 25 heavy duty diesel trucks.

Of the 167 vehicles, 13 buses and one truck failed but, after repairs, all vehicles passed the test.

To become involved in CleanRun or to register your interest in the program, email cleanrun@dec.wa.gov.au or visit www.dec.wa.gov.au/airquality.

Frogs croak up a racket

THINKING of escaping to a natural environment for a bit of peace and quiet?

Well it turns out nature may not be as quiet as we think.

A recent DEC and Curtin University of Technology study of 'natural quiet' found nature is noisier than expected.

Frogs are particularly noisy neighbours, croaking up a racket throughout the night.

The Natural Quiet pilot study at Lake Leschenaultia was born from a realisation that while we have noise regulations to manage industry and preserve residential amenity, little exists when it comes to protecting our natural environments from man-made noise.

DEC Environmental Noise Officer Emma Bridgeman said there was a realisation within the Environmental Noise Management Section that existing noise regulations were inappropriate when assessing proposed development that may impact on naturally quiet environments.

"At the moment our levels apply in areas where people live," Emma said.



Students from Curtin University of Technology involved with the study with local park ranger Ray McLean (second from the right) at Lake Leschenaultia

"Our regulations don't come into play until there's a complaint. But in natural areas, no one lives there and so there's often no one there to complain.

"Research shows that people value wilderness areas for the solitude and quiet - we need to preserve that.

"To do that, we need relevant assessment criteria and noise baseline data."

By Samille Mitchell

To address this, DEC enlisted the help of six third-year Curtin University of Technology students studying a Bachelor of Science in Environmental Health.

Under DEC guidance, the students set up noise monitoring equipment at Lake Leschenaultia

and monitored noise levels throughout the day and night.

They then used DEC equipment to analyse the recordings and made some interesting findings.

"Surprisingly, we found that noise levels were higher at night," Emma said.

"When we listened to the recordings it was obvious that this was caused by frogs. The frog chorus began at sunset and went throughout the night.

"Then, on sunrise, the birds started their song."

While noisier than expected, these recordings of natural sounds are extremely valuable.

"The frogs' chorus is clearly an important part of their natural behaviour and likely to be vital for their survival," Emma said.

"If we allow man-made noises to override the acoustic environment then we not only ruin it for ourselves but we may also be damaging the species that live there.

"Protecting natural quiet is important for humans, but it could be equally important for animals too."

Briefly...

WA hosts Wildlife Rehabilitation Conference

The Western Australian Wildlife Rehabilitation Council is hosting this year's National Wildlife Rehabilitation Conference.

The conference will be held from Monday 6 to Thursday 9 August 2007 at the Fremantle Esplanade Hotel and will provide an opportunity for wildlife rehabilitators from across the country to come together to learn, share and network with colleagues.

It will cover a broad range of wildlife-related issues presented by zoologists, researchers, specialist rehabilitators, veterinarians and professionals working in various wildlife fields.

An optional half-day autopsy session will be held on Friday 10 August.

For more information and to register for monthly emailed updates, email nwrcperth@westnet.com.au or visit the conference website at www.nwrc.com.au.

New writers for *Environment and Conservation News*

Environment and Conservation News has two new contributing writers – Samille Mitchell and Joanna Moore.

They have joined Rhianna King, who is acting Publications and Programs Manager while Sue McKenna is on six months' leave, and Corporate Communications Manager Kaye Verboon, in DEC's Strategic Development and Corporate Affairs Division. Samille, an experienced journalist and book author, has come on board as Publications Officer to work on DEC's saleable books and *LANDSCOPE* magazine and Jo, a DEC graduate recruit, has joined the team as Communications Officer.

If you have a story idea for *Environment and Conservation News*, please email Rhianna (rhianna.king@dec.wa.gov.au), Jo (joanna.moore@dec.wa.gov.au) or Samille (samille.mitchelle@dec.wa.gov.au) or speak to one of them by phoning 9389 8644.

Staff make the move to Kensington

THERE'S been a lot of extra activity at DEC's Kensington site since nearly 50 staff relocated from The Atrium to new demountable offices.

Director General Keiran McNamara said the relocation was an important part of the integration process started in July last year with the merger of the two departments.

"There are many advantages to be gained through the co-location of staff from similar areas, and also support areas, of the former departments," he said.

Keiran also thanked the staff for their forbearance during the shifting process.

The combined efforts of Financial Services Branch Manager Mark Neilson, Nature Conservation Finance Manager Frank Mansillas, Environmental Protection Authority Executive Officer Graham French and other staff helped move the five Wetlands program staff, 12 Native Vegetation branch staff and 30 Air Quality Management branch staff to the new 'mega' demountable.

Frank said setting up the new demountable included organising the many contractors required for the major site works involved, the internal fit-out of more than 50 personnel stations, and all the technical aspects including phone lines, internet and database access.

"Frank has been continually trouble shooting

for the relocated staff and Mark himself was working on the compactor to get everything done in time," Graham said.

And they were on a tight timeline – just three weeks passed between initial site preparation and the staff move.

A second transportable is being built and will arrive at Kensington in April or May to provide more spacious accommodation for the Air Quality Management staff.

Landscape architects will also be contracted to plan gardens and paths around the demountable.



(Left to right) Frank Mansillas, Keiran McNamara, Gordon Wyre, Kelly Faulkner, Kim Taylor, John Sutton and Mark Neilson outside the new demountable office. Photo – Joanna Moore



A section of the new demountable being lowered into place. Photo – Mark Neilson

Conservation guidelines

By Kathryn Allen

THE Conservation Commission of WA has released the *Interim Guidelines for the Preparation of Management Plans for Terrestrial Conservation Reserves* to ensure conservation reserves are managed as a system, recognising that each reserve, while being a discrete entity, contributes to the whole.

"Managing WA's conservation reserves is an important responsibility that can always be improved, from planning to on-ground operations," Conservation Commission Chairman John Bailey said.

The guidelines were a requirement of the *Forest Management Plan 2004–2013*, which encompasses three DEC south-western regions.

"While working to develop the guidelines we recognised they would be useful for reserve management planning across the board and the project was expanded to encompass the entire State," John said.

Planners in the management planning and regional parks units worked with the Conservation Commission to develop the guidelines.

"The guidelines highlight the links between laws, policies and management to help land managers, planners and the public see how the management fits in the big picture. For example, the guidelines help identify where issues should be considered at a State-wide or landscape ecological scale to ensure that the activities in one reserve complement those in a neighbouring, or even distant, reserve," John said.

"They should also help improve public understanding of management planning and thus enable them to more effectively contribute during consultation processes, which, in turn, will help to improve how management meets public expectations.

"This is a living document that will be adjusted over time to address new knowledge as well as changes in laws and policies."

The guidelines are available from www.conservation.wa.gov.au or by contacting Kathryn Allen on 9389 1766.

Post-fire fungi bloom in south-west



DEC's Rod Simmonds with a native bread fungus. Photo – Richard Robinson

JUST two weeks after a wildfire burnt through 166 hectares of 28-year-old karri regrowth south-west of Pemberton, evidence of new life could be found in the area. And so could DEC scientists.

Richard Robinson and Julie Fielder from DEC's Science Division and Rod Simmonds from the Warren Region visited the area to record the species of fungi that had been stimulated to fruit by the fire.

The group observed three species in particular – the stone maker fungus, native bread and the leathery saw-gill (also called the finger fungus), which commonly appear within the first week after a fire.

The species do not fruit annually or in response to rain, but appear to only fruit following fire.

They are all wood decay fungi that colonise rotting dead roots, stumps or logs. They do not fruit on the rotting wood but from underground structures, called sclerotia.

By Richard Robinson

Each species was abundant in the area and surveying revealed that on average about 5000 leathery saw-gill fruit bodies were present per hectare.

The large fruit bodies of the stone maker and native bread ranged from 20–30 centimetres diameter and the below-ground portion, the sclerotia, were also very large. One specimen of native bread collected weighed 15.75 kilograms.

While bushfires can be destructive, some fungi and other species depend on them to exist. Fungi is one of the first forms of life to respond following fire.

Little information on the biology and ecology of these fungi is available, but ongoing field studies are improving our knowledge.