



Department of Environment and Conservation

Our environment, our future

ENVIRONMENT AND CONSERVATION

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January, February, March 2009

Fifty years in the public service

DEPARTMENT of Environment and Conservation (DEC) Public Affairs Officer John Hunter was just 15 years old when he started what has become a 50-year career with the public service.

He has seen ink-dipped pens give way to typewriters, typewriters move over for computers.

He has worked under 11 premiers and even more ministers, he has seen departments merge and split up several times and he has captured the hearts of his colleagues with his light-hearted antics and amusing anecdotes.

And all the while he has followed a passion for music after work hours, playing gigs three or four nights a week, doing volunteer entertainment tours of Vietnam in the late 1960s during the war and, in his annual leave, playing at concerts across the country.

Speaking at a celebration of John's service at DEC's Cygnet Hall office in December, Strategic Development and Corporate Affairs Director Ron Kawalilak paid tribute to John's work.

"He's a musician, a writer, an urban naturalist, an incredible fountain of knowledge, a story teller and a bloody good team player," Ron said.

So where did it all begin?

"I was 15 when I started as a courier for the Public Works Department on December 5 in 1958," John said.

John was soon promoted to junior clerk in the old Barracks on St Georges Terrace, then transferred to the payroll office at the East Perth Plant Engineers Workshops. Soon after, it was back to the Harbour and Rivers Branch at the Barracks, then the Country Water Supply office, and later the Minister for Works public relations office, where he embarked on what has become a lengthy career in publications and public relations.

In 1972, John successfully applied for a publications officer job with the then Department of Fisheries and Fauna. This was the kind of job he'd been dreaming of. Having long nurtured a passion for nature, and been a member of the WA Naturalists' Club since the age of 15, the chance to work in a job promoting wildlife was just the shot for the then 29-year-old.

It wasn't long before he was promoted to publications and publicity officer with the National Parks Authority which, in 1985, became CALM after the National Parks Authority, the wildlife division of the Department of Fisheries and Wildlife and the Forests Department merged to form CALM - now DEC.

Times were certainly different then. In earlier days, some office staff were also awarded ranger responsibilities. This meant John could be called from his desk at the Crawley head office to drag undesirables from Matilda Bay and other nearby reserves or be asked to look after confiscated or injured fauna.

In 1987, John moved to the newly formed CALM publications branch at Cygnet Hall, where he remains today with DEC.

It has been a long, sometimes bumpy, but enjoyable journey. "I went literally from using pens you dipped in ink wells to working with typewriters," he said.

"We'd have big typing pools where you'd take your letters to a typing pool and the women - it was only ever women - would type them for you.

"Then came computers and now, of course, the internet and emails - they have really changed things.

"When I started as a boy looking after files and office correspondence, it was 'curtains' if all outgoing letters were not checked and signed-off by the chief clerk.

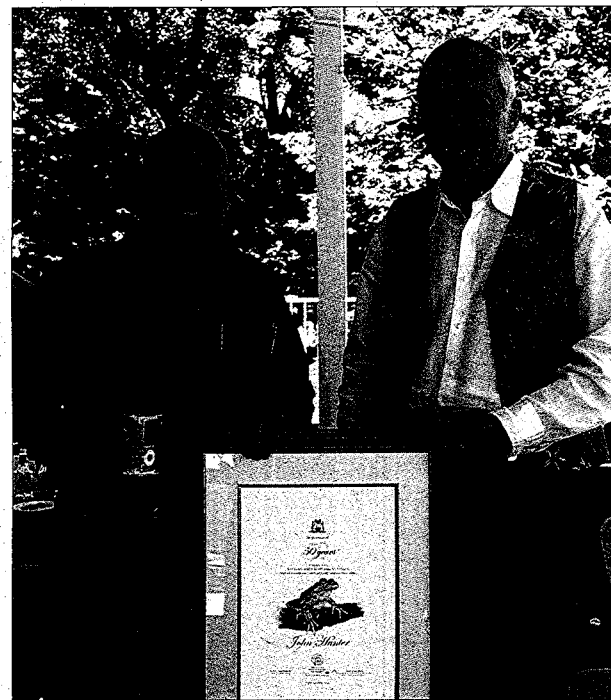
"While email is a great system, I do think we've lost something by relying on it so much now."

John marks promoting major events like the opening of the Diversion Dam and Ord River Dam, his time as editor of the *State Wildlife Authority News Services* (SWANS) magazine and working as a public relations officer with the National Parks Authority as career highlights. He says working on film sets with the likes of Steve Irwin, David Attenborough, Harry Butler and other celebrities has also been fabulous.

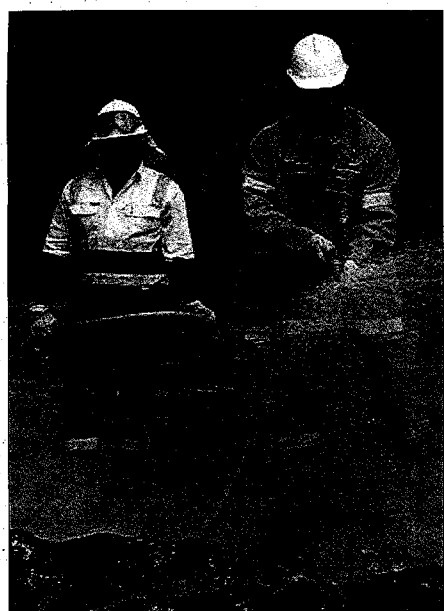
So what's next for John?

"I'll just carry on doing what I do," he says with a shrug and that characteristic twinkle in his eye.

"There are nearly two million stories in this city, I've got plenty of writing to do yet."



DEC Public Affairs Officer John Hunter (left) accepts an award for 50 years in the public service from Strategic Development and Corporate Affairs Director Ron Kawalilak.



Indigenous Trainee Michael O'Dene (left) and Conservation Employee Kyle Wilson battling a blaze at Yanchep National Park. Photo - Leanne O'Rourke

Firey start to the year

By Catherine Jack

MORE than 600 DEC and Forest Products Commission staff were involved in fire operations during five days in January when fires flared up in Bridgetown, Yanchep, Perth and remote areas.

On Thursday 15 January, with temperatures above 40 degrees Celsius, two large bushfires led to three pre-formed fire teams being called in, rostered days off being cancelled and some staff being called back from leave to assist in the fire operations.

DEC staff from 30 different districts and branches across the State, from Broome to Esperance, came to assist in the firefighting activities.

On Friday 16 January DEC took control of a fire in Bridgetown following a request from the Shire of Bridgetown-Greenbushes.

The fire burnt through almost 6,000 hectares, including 2,000 hectares of

private plantations, and destroyed nine houses and many sheds.

DEC Project Officer Tammie Reid was an Information Officer at the fire and said the Incident Control Team held community meetings at Bridgetown and Greenbushes that were attended by 500 people.

"The Shire of Bridgetown-Greenbushes, and local community gave a lot of positive feedback to DEC staff over the management of the fire," Tammie said.

The Bridgetown fire was close to being contained on Monday when a deliberately lit fire in the Blackwood Valley plantations south of Balingup was detected.

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DEC fire crews help battle Victoria blazes

FIFTY-FIVE DEC men and women were part of two Western Australian contingents that travelled to Victoria to help manage bushfires that ravaged the State and claimed 173 lives in February.

The first deployment included Senior Fire Planning Officer Roger Armstrong, Midwest Regional Leader Nature Conservation Anthony Desmond, Wheatbelt Regional Operations Manager Paul Blechynden, Perth Hills District Senior Ranger Michael Phillips and Fire Training Officer Alex Moylett and two front-line crews.

The second was led by DEC's Swan Region Manager Paul Brown and made up of 16 front-line fire fighters, three sector commanders and a 19-member incident management team with leaders in control, operations, planning and logistics functions. Six light fire fighting tankers were also sent.

Staff from the Forest Products Commission, Fire and Emergency Services Authority and the Shire of Serpentine-Jarrahdale were also part of the WA deployment.

DEC staff were based at Noojee, approximately 125 kilometres east of Melbourne, and Woori Yallock, north-east of Melbourne.

DEC Director General Keiran McNamara said the Victorian bushfires were a national tragedy.

"We can never be complacent, which is why a proactive prescribed burning program, backed by science and experience, is used as the primary fire protection strategy in the south-west of WA," Keiran said.

"A key part of the team's work in Victoria was



The second Western Australian contingent leaves from Perth Airport to assist with managing the Victorian bushfires.

backburning from strategic breaks to create low fuel buffers ahead of the main fire front.

"The experience our crews had in prescribed burning in the karri forests of the south-west was highly valuable in performing what can be difficult and demanding tasks associated with backburning."

Roger said the similarity with karri forest fires meant that our crews felt very much 'at home'.

"The fire control strategies used in Victoria were similar to those used in karri forest fires," he said.

"Crews were comfortable with the tasks to which they were assigned, particularly in using their experience with prescribed burning to undertake backburns to consolidate containment lines."

"The work involved using heavy earthmoving machines such as bulldozers and front-end loaders to push through breaks and using winds as they go 'round the clock' to backburn the right bit at the right time."

"The Victorian operation involved an enormous number of machines, in some instances there was one machine for every five fire crew."

Since 2000, WA has sent teams to assist with bushfires in the United States, New South Wales, Victoria and South Australia. This was the first time front-line fire crews have been deployed.

Working Together

The three months covered by this edition of *Environment and Conservation News* has been a period of continuing global financial crisis and also a time when we have all seen the tragic effects of bushfires in Victoria. Both have importance for DEC and our staff.

The Government's 3% efficiency dividend took effect on 1 January. I acknowledge that this budget reduction, on top of pre-existing cost pressures, poses challenges for us in delivering our roles across this large State. At the same time, however, it also presents an opportunity for the department to look closely at how it goes about its work. Over a long period of time I am sure we have accumulated some activities and practices that no longer represent our priorities or the most efficient ways of doing things. I encourage all staff to contribute in their workplaces to an ongoing process of improving efficiencies.

During March I had the opportunity during a visit to Victoria to meet with fire staff in our sister agencies there as well as take a helicopter flight over some of the worst affected areas. It was a very sobering experience, and reinforced the importance of DEC continuing to strive for and maintain the highest standards of planning, preparedness and response in terms of our own fire responsibilities. To that end we have been participating in a Government-wide review of bushfire preparedness in WA.

Other priorities in recent times and also for the period ahead include delivering on the Government's election commitments. The new Environmental Community Grants program has been established and the call for applications has been advertised. Improvements to project approvals processes across Government have also been a focus of efforts by both DEC and the Environmental Protection Authority. Preparatory work for new conservation strategies in the Kimberley and the Great Western Woodlands is also well underway.

Keiran McNamara,
Director General



Soil guidelines open for comment

DEC's Contaminated Sites Branch has released new acid sulfate soil guidelines for public comment.

Acid sulfate soils cover much of the Swan Coastal Plain and an estimated 27,500 square kilometres of coastal and estuarine environment.

Acid Sulfate Soils (ASS) Section Manager Stephen Wong said the guidelines – *Treatment and management of soils and water in acid sulfate soil landscapes* – would help people

manage soil and water affected by acid sulfate.

"This is a document based on more than five years of practical experience in dealing with acidity issues in Western Australian urban landscapes," he said.

The document provides thorough and comprehensive guidelines for land developers, consultants and regulatory authorities to manage and avoid excessive disturbance of acid sulfate soil.

"The document has been highly anticipated and we expect it will be welcomed by our stakeholders as it consolidates the management of soils and water into one document," Stephen said.

"The guidelines also address the additional sources of acidity that are contributing to the acidification of groundwater in poorly buffered sandy aquifers on the Swan Coastal Plain."

Stephen said acid sulfate soils were naturally occurring and generally only posed a threat to the environment when they were exposed to oxygen, for example by excavation or draining of the soil.

"Understanding the distribution of acid sulfate soil materials and other potential sources of environmental acidity is a prerequisite for preventing environmental problems."

The guidelines can be downloaded from DEC's website at www.dec.wa.gov.au/management-and-protection/acid-sulfate-soils/guidelines.html.

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More awards for Swarbrick Forest

SWARBRICK Forest, part of the Wilderness Discovery Centre managed by DEC, has received the Interpretation Australia Association's (IAA) award for Excellence in Heritage Interpretation.

Home to some of the tallest and oldest trees in Australia, Swarbrick Forest has long been a key site for conservationists.

Award judges were taken by the 39-metre, mirrored 'Wilderness Wall of Perception' that features quotes from interviews and literature on forests in WA during the past 100 years.

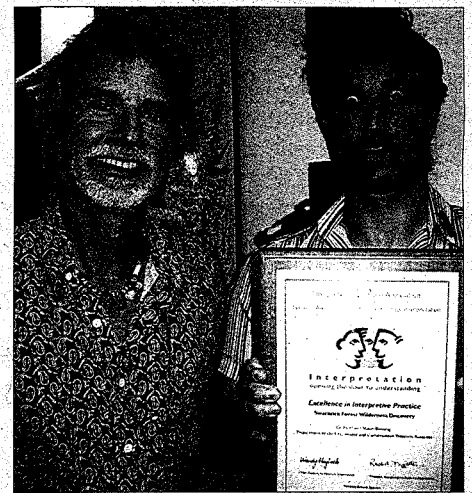
The quotes displayed on the wall reveal the changing public perception of land conservation in the political, social and cultural contexts of the period.

DEC Parks and Visitor Services Interpretation Unit Coordinator Gil Field and Senior Designer Shaun Bunting received the award at the IAA annual National conference in Adelaide.

"This is the third IAA Award DEC's Interpretation Unit has received – the Hamelin Pool Stromatolites interpretation in the Shark Bay World Heritage Area won in 1998, Jurabi Turtle Centre adjacent to Ningaloo Marine Park won in 2005 and now Swarbrick Forest in the Walpole Wilderness in 2008," he said.

"It is a great honour to be appreciated so highly by our peers and visitors to the area and it is indicative of the professionalism, collaboration and innovative creativity inherent in the Recreation Planning and Interpretation Branch and the PVS staff in the regions."

The Swarbrick Wilderness Discovery



Gil Field and Shaun Bunting with their IAA Award for Excellence in Heritage Interpretation at Swarbrick.

Centre site provides visitors with spaces for introspective contemplation of the forest and wilderness and, in early 2008, it won a landscape architecture award.

With its innovative interpretation trail and five unique artworks the site was awarded the Australian Institute of Landscape Architects award for Excellence in Public Art in Landscape Architecture.

"This was a wonderful acknowledgment of the PVS Recreation Planning and Design Unit working collaboratively with Warren Region and Frankland District staff," Gil said.

The Walpole Wilderness Discovery Centre site in Swarbrick Forest is located eight kilometres from Walpole on North Walpole Road.

Wattles partnership celebrated

DEC celebrated a partnership with the mining industry at a book launch in December.

Robe River Iron, a member of the Rio Tinto group, provided \$140,000 to DEC to study Pilbara wattles.

The funds resulted in the production of the new Bush Book *Wattles of the Pilbara*, and the descriptions of 12 new wattle species for the Pilbara region in the latest edition of the WA Herbarium's scientific journal *Nutsyia*. The funds will also assist with the launch of a Pilbara wattles page on the World Wide Wattle website at

www.worldwidewattle.com and the production of a Pilbara wattle reference guide book and electronic key CD.

Among the newly named species is the Robe wattle (*Acacia robeorum*), which acknowledges Robe River Iron's support for the project.

Speaking at the launch, DEC Science Division Director Neil Burrows said naming a species after a mining company was believed to be an Australian first.

Neil paid tribute to the benefits of private, public and business collaboration.

"This project shows just what can be achieved with partnerships," he said.

"This partnership has enabled us to conduct a wealth of study into Pilbara wattles and significantly increase our understanding of this important genus."

By Samille Mitchell

Neil also paid tribute to Bruce Maslin and Stephen van Leeuwen, who led the Pilbara wattle studies.

"Bruce has worked on wattles for 40 odd years, that's why I'd say he's the world expert on them," Neil said.

"Stephen has worked in the Pilbara for 25 years, and has conducted many botanical surveys, including the botanical component of DEC's Pilbara Biological Survey."



Authors of the Bush Book Wattles of the Pilbara Stephen van Leeuwen and Bruce Maslin. Photo – Samille Mitchell

\$6 million for new environmental community grants program

COMMUNITY groups undertaking environmental and conservation activities will share \$6 million in grants during the next four years.

Environment Minister Donna Faragher said that grants of up to \$30,000 were available.

"The environmental community grants program is a priority for the State Government and addresses one of our core election commitments," she said.

"There are seven categories of grants, including biodiversity conservation; sustainable catchment management; nature appreciation in natural areas; and regional parks and Bush Forever sites.

"The grants also recognise the valuable work of wildlife rehabilitators through a category for the rescue and

rehabilitation of injured or incapacitated fauna.

"Funding is available for projects which conserve, enhance or restore natural areas or values, as well as activities that raise public awareness of nature conservation at a local level."

In 2009, the amount available totals \$1.53 million to help with projects involving:

- biodiversity conservation (\$420,000);
- sustainable catchment management (\$300,000);
- rescue and rehabilitation of injured or incapacitated fauna (\$30,000);
- nature appreciation in natural areas (\$180,000);
- regional parks and Bush Forever sites (\$180,000);
- support for major conservation/environmental organisations (\$120,000); and

- protection of high-value areas by landholders on private land (\$300,000).

The program would be administered by DEC with reference to independent advice and grants approved by the Environment Minister.

Mrs Faragher said priority would be given to projects sponsored by community and not-for-profit organisations, while private landowners with areas of high conservation value on their properties and local government authorities were also eligible to apply for funding.

"Volunteer community groups and individuals do a remarkable job in caring for our environment and I encourage them to take advantage of this opportunity," she said.

Application forms can be downloaded from www.dec.wa.gov.au and must be submitted by Friday 1 May.

A new era for fire operations

A NEW Incident Control Centre set up for the management of wildfire was successfully applied at a fire at Bridgetown in January.

DEC took control of the fire in Bridgetown on Friday 16 January and, under the control of Incident Controllers Roger Armstrong and Greg Mair, introduced a new incident management setup and moved the command centre forward from Kirup to the already established operations point at the Bridgetown showgrounds.

DEC-managed fires are run by an Incident Controller who leads the Incident Control Team, which is organised into three sections – planning, logistics and operations.

The operations section is directly involved in firefighting activities, including managing the myriad of resources needed for fire suppression, such as people, trucks, bulldozers and aircraft. This section is always located on site, a safe distance away from the fire. The bulk of the Incident Control Team undertake roles in the planning and logistics sections and are often located in a district or regional office, sometimes up to two or more hours away from the fire, particularly in remote regions.

The planning and logistics sections develop plans of action, type documents, file records, produce maps and coordinate the logistics of feeding, accommodating and transporting all the people and material involved in the incident.

Research into different Incident Control Team setups, including study tours and fire deployments to the United States by DEC staff, have shown it can be very beneficial to have only one Incident Control location, on site, where all fire management operations are based.

DEC Fleet Supervisor Alan Jones and Project Officer Grég Napier have been working to build up the supplies and logistics needed for this to work in WA, including acquiring portable shipping containers or 'dongas' which have been set up as offices, and the trucks necessary to move them, as well as mess tents, generators and a lighting plant.

A year's work and research was trialed in Nannup before being taken through its true baptism of fire in Bridgetown.

DEC Project Officer Tammie Reid was an Information Officer at the fire.

"On Saturday night it was decided to move the Incident Control Team from Kirup Work Centre to join the operations point in Bridgetown," she said.

"Not only did the planning and logistics teams have to consider the relocation of the entire Incident Control Centre, but they also had to prepare the detailed incident action plan for the next rostered shift of staff, ensure food and accommodation were available, maintain traffic control and keep the affected communities informed.

"The cooperation, support and teamwork required for this undertaking demonstrates the incredible commitment of these people."

At 6.30am on Sunday the temporary 'donga' offices were delivered to the Bridgetown showgrounds and the Fire Management Services Information Technology team began connecting the offices to their established computer and communications network.

By 7am there was a fully functioning Incident Control Centre established in the heart of Bridgetown and ready for the incoming day-team led by John Tillman.

"The real heroes of this operation were the Fire Management Services IT people, as they were given the mammoth job of setting up all the services in order to get the operations point running and keep it running for as long as necessary," Tammie said.

Working under the leadership of Operations Officer John Tillman the new setup was aptly dubbed 'Tillyville'.

"Having all the sections together generated a great feeling of support and confidence in the ability of the team and it provided a unified front and reassuring presence to the community," Tammie said.

"This setup also provided field work centres for the Shire bushfire brigade, the Fire and Emergency Services Authority, WA Police and Western Power and ensured that decisions and actions were undertaken in a cooperative and coordinated manner."

The success of the Incident Control set up received positive feedback from the Bridgetown Shire, community and staff involved. Fire Management Services is working to further improve the setup by ensuring the location of each section and their units is conducive to effective and timely communication, and providing more shaded areas.

Tammie said that due to the number of fires in January, the DEC pre-formed team on duty had already been dispatched to fight fires in Yanchep, so other teams on their off weeks were called in to assist.

"These fire crews worked at the height of their capacity under intense pressure and, at Bridgetown, were working with a smaller team than usual," she said.

"They were able to successfully suppress a large wildfire covering 6,000 hectares of land, arrest and contain a very difficult fire in the Blackwood Valley and simultaneously trial a completely new Incident Control setup – an outstanding effort and a great example of the extraordinary capacity of DEC's people."



DEC fire crews receiving a briefing.

Albany community donates \$10,000 to Victorian fire victims

DEC and local volunteer bushfire brigades raised more than \$10,000 in a street appeal in Albany to assist victims of the Victorian bushfires.

Fundraising teams operated from shopping centres throughout Albany, the Albany Farmer's Markets, the leisure centre and Albany's town centre to raise money for donation to the Red Cross Appeal for the Victorian Bushfires.

DEC Albany Visitor Services Interpretation Officer Corinn Hine said support from the community was overwhelming.

"All the volunteers were greatly inspired by the stories of generosity they witnessed, from children donating their pocket money as they left swimming lessons to shoppers who opened their wallets without hesitation," she said.

"One 13-year-old busker even emptied his takings into a bucket twice during the morning."

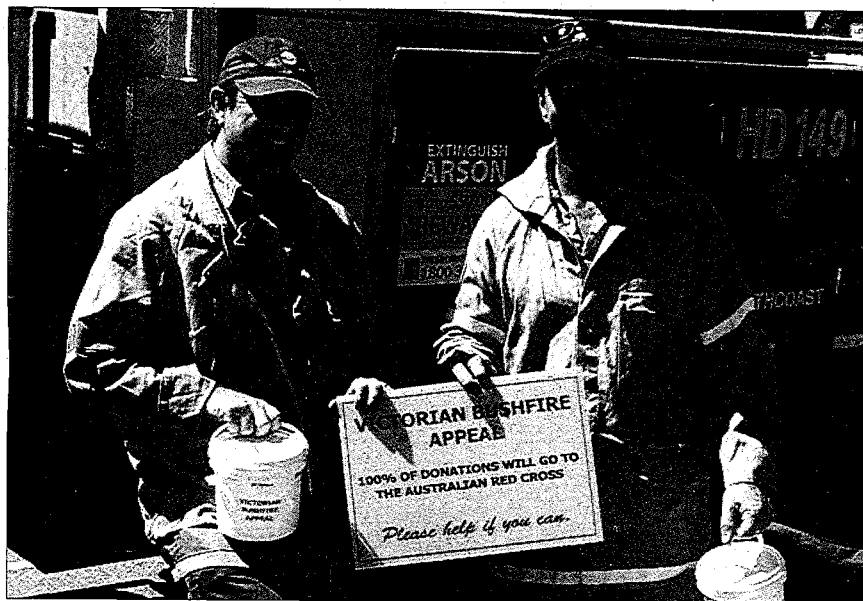
Volunteers included 11 staff from DEC's Albany District office and 19 members of the Kalgan, King River, Torbay and South Coast volunteer bushfire brigades.

Corrin said the fundraiser also was an opportunity to showcase the equipment and resources dedicated to fire responses in the area.

"The volunteer bushfire brigades parked six of their rapid response vehicles near the fundraising teams and a DEC heavy duty fire truck and a light vehicle were positioned at the top of York Street in Albany's town centre to promote awareness of the appeal," she said.

"One fundraising team received enquiries about joining a brigade, which is really positive to see at a time like this.

"DEC would like to thank the community for their generous donations, which will help rebuild the lives of the victims of the Victorian bushfires."



DEC South Coast Region's Darren Little (left) and Vince Hilder collecting for the fundraiser.

Letter to the Minister

Dear Minister

RE: BRIDGETOWN FIRE JANUARY 2009

I would like to take this opportunity on behalf of the residents of Bridgetown-Greenbushes to register our sincere thanks for the efforts undertaken by the Department of Environment and Conservation (DEC) during the recent emergency situation that applied here in Bridgetown.

It is very easy during an emergency to simply accept the work being undertaken by government agencies. The resources brought into the district including a state-of-the-art communications unit provided the essential coordination facility to deal with the fire particularly given the broad front when the fire broke containment lines.

The professionalism and leadership shown by Mr Greg Mair during this period and in particular when attending the Emergency Management Meetings as a lead participant has been very well received.

In thanking you could I also indicate that, whilst I appreciate the necessity in this current economic climate to curtail expenditure, costs such as overtime, additional resources, emergency purchases etc, must never be compromised during an emergency and provision needs to be made to cover these unforeseen circumstances even if it is at Treasury level.

Yours sincerely

Cr. Brian Moore

Shire President

Shire of Bridgetown-Greenbushes

22 January 2009

... continued from page one

"A new Incident Control Centre had been established in Bridgetown and was working well when the Balingup fire was detected. Resources were immediately diverted to it and both fires were managed from the one place," Tammie said.

"The Balingup fire was hit with everything we had, including six waterbombers, 12 bulldozers and 18 fire trucks and, by 8.30pm Monday night, the fire was contained."

Fifty kilometres north of Perth in Yanchep, another fire was raging. The Yanchep fire burnt through more than 7,500 hectares of

land, including the northern end of Yanchep National Park and about 2,300 hectares of a pine plantation.

Swan Coastal District Fire Coordinator Mike Cantelo said that if it wasn't for the prescribed burning that took place in the national park during the past five years, the fire would have been more than twice the size.

The Forest Products Commission is now engaging in a recovery operation that will involve a major pine salvage effort and the area will be patrolled during the next few months until the first significant rain.

During the course of these fire operations DEC worked closely with local volunteer bushfire brigades, the Fire and Emergency Services Authority, Forest Products Commission, WA Police, Main Roads, Western Power, local shires, contractors and private forestry companies.

DEC Director General Keiran McNamara commended all staff on their work.

"I thank everyone involved for their efforts, especially for the exceptional camaraderie among staff during times such as these," he said.

"Emergency situations reveal the true

character of an organisation.

"The manner in which staff from diverse sections of the department came together in their teams in an integrated and highly effective manner is particularly commendable and a credit to all."

The department was also involved in fighting fires in Kings Park, Zuytdorp Nature Reserve and Hamelin Station near Shark Bay, Gnarlouo Station north of Carnarvon, Cane River Conservation Park in the Pilbara, Dundas Nature Reserve, the Vasse pine plantation, Mount Dale, Dwellingup and Ferndale.

Air-watch laser in action

DEC has a new weapon against industrial polluters with the recent acquisition of state-of-the-art air monitoring technology.

The revolutionary emissions detection laser system, called Lidar, was purchased from US defence company Lockheed Martin Coherent Technologies. This powerful laser is used by the US Air Force and many international airports and DEC is the first in the world to receive the new generation of Lidar.

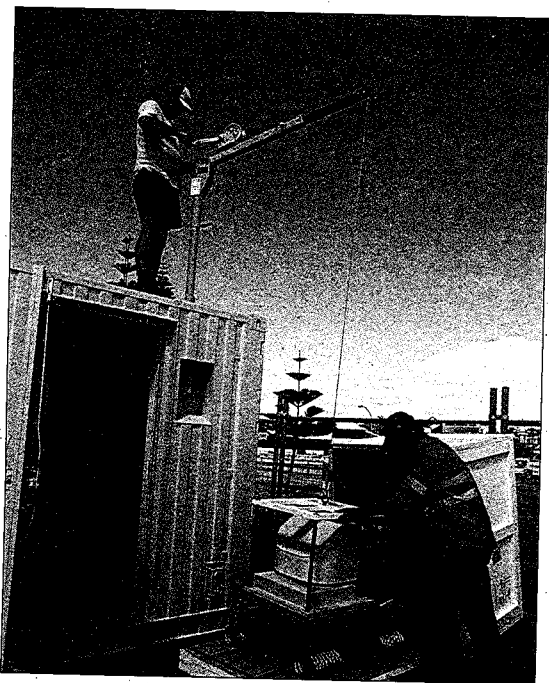
DEC Air Quality Branch Manager John Sutton said the Lidar would provide more technical information about emissions than ever before.

"This system will allow for the detailed measurement of industrial emissions and the detection of plumes to a distance in excess of 15 kilometres," he said.

"Not only will the Lidar assist DEC as an environmental regulator, it will also put us at the cutting edge of emissions monitoring using the most advanced technology available.

"That DEC has taken delivery of the very first Lidar of this model is testament to the department's commitment to delivering effective responses to air quality issues across Western Australia."

The Lidar can be used in a range of different applications - including monitoring the movement of gas plumes and particles from industrial sources, contaminated sites, and various meteorological applications including the detection of wind shear at airports and defence and homeland security applications.



Technical Officer Steve Price (left) and Air Quality Officer Murray Cox installing the Lidar.

"DEC will deploy the Lidar wherever it is needed around the State, including Kwinana, Wagerup and Port Hedland," John said.

Lockheed Martin's Coherent Technologies Principal Product Design Engineer Keith Barr travelled from the US in December last year to provide DEC Air Quality Branch staff training and guidance in the use of the laser.

Contaminated sites project under way

TWENTY-FIVE million hectares of DEC-managed lands and waters are being inspected to identify the effects of past use.

DEC's Contaminated Sites Branch will look into past activities such as storage and distribution of fuels and chemicals, railway activities, mining and mineral processing, solid and liquid waste disposal, mechanical workshops and various agricultural practices. All of these actions have the potential to cause contamination of the soil, sediment and water, including groundwater.

In order to coordinate and manage this massive review, Alan Walker, in his then role as Director of Regional Services, developed a 'Program for Reporting of Contaminated Sites' in accordance with section 12 of the Contaminated Sites Act 2003.

Contaminated Sites Branch will collate and review site records and other relevant information before inspecting sites with regional and district officers.

This will involve reviewing

and documenting the land uses, geology, hydrology, hydrogeology, flora and fauna and heritage aspects of each site.

Contaminated Sites Branch Manager Kerry Laszig said the section 12 reporting program was a massive undertaking which would involve close collaboration between DEC staff at branch, regional and district levels.

"The commitment and professionalism of all staff in preparing the delivery of this complex and onerous task is impressive and they are to be congratulated," she said.

At sites where there are sufficient grounds to indicate possible contamination, Contaminated Sites Branch will provide written advice to the regional manager, recommending that sites should be reported under section 11 of the Contaminated Sites Act 2003.

This inspection and review of DEC-managed lands and waters is due for completion in November 2009.

Ningaloo Coast for World Heritage

DEC is helping to prepare a World Heritage nomination for the Ningaloo Marine Park and Cape Range National Park that, if successful, will result in the area becoming the third Western Australian World Heritage site, along with Shark Bay and Purnululu.

DEC senior planning officer Jacinta Overman said the nomination focuses on several of the area's outstanding values, including Ningaloo Reef and its diverse marine life, 'megafauna' such as whale sharks, Cape Range geology and the region's rare cave fauna.

"Ningaloo Coast is such a special area in so many ways - this nomination is not only about the reef but also about factors like the way the region's limestone geology and the rare fauna it supports provides a picture of plate tectonic movements and the evolution of coral reefs over time," she said.

Jacinta said the State Government's support for the project

demonstrated its commitment to conserving the natural values of Ningaloo.

DEC planning officer Rebecca Coyle said World Heritage listing would play a big role in bolstering tourism, while protecting the environment.

But she said World Heritage listing would not change the way lands and waters were managed or alter existing land uses and activities.

"We already have the Ningaloo Coast regional strategy which sets the long-term planning framework for the area and comprehensive management plans cover Ningaloo Marine Park and Cape Range National Park. So World Heritage listing won't bring any significant changes to management," she said.

"But it will provide a real boost for tourism by promoting the natural wonders of the area."

The State Government's proposed boundary encompasses

State and Commonwealth waters in Ningaloo Marine Park; Cape Range National Park; Jurabi and Bundegi coastal parks; an area of unallocated Crown land north of the national park; the Learmonth Air Weapons Range and land earmarked for exclusion from pastoral leases abutting Ningaloo Marine Park.

Not included in the State's proposed World Heritage boundary are the marine management area around the Muiron Islands, a proposed conservation and limestone management reserve, two tourism nodes as well as existing and potential quarries on unallocated Crown land and pastoral station homesteads and associated infrastructure.

The State Government will now liaise with the Commonwealth Government to determine how the nomination will proceed. It is the Commonwealth's responsibility to submit the nomination to the UNESCO World Heritage Committee.

Saving Forrestdale Lake cygnets

TWELVE abandoned cygnets were saved from the drying waters of Forrestdale Lake Nature Reserve in Armadale when DEC staff and volunteers carried out a bird rescue mission in early January.

Forrestdale Lake's summertime drop in water levels had led to swans leaving the lake in search of better food and water, leaving their unfledged cygnets behind and vulnerable to predators in the area, particularly foxes.

DEC Conservation Officer Sean Walsh said the cygnets' only chance for survival was to be relocated to other suitable lakes or put into the care of bird handlers until they were strong enough to be released back into the wild.

"This is the first time we have attempted such an operation, but we saw what happened when this lake dried up in the past and it is important to do everything we can to rescue these vulnerable young birds," he said.

"It will potentially become a seasonal job."

At 6am on Tuesday 6 January DEC Wildlife Officers and Swan Coastal District staff, together with about 70 volunteers from bird handling organisations such as Native Arc, the Darling Range Wildlife Shelter, Malubillai Wildlife Carers Network, Seabird Rescue and the Waterbird Conservation Group began the operation.

Staff and volunteers guided the cygnets into a holding pen on the western side of the lake where they were checked by a vet before being relocated to safe sanctuaries around Perth.

Forrestdale resident David James and local bird carers teamed up with DEC Swan Coastal District Conservation staff and Wildlife Officers in monitoring the lake for two months before the muster. The group saw the swan population decline from 168 cygnets to 13 in just a few months as the majority of cygnets reached maturity and left in search of a better habitat.

"The black swan is the official bird emblem of Western Australia and it is vital we protect these magnificent and iconic creatures," Sean said.



Malubillai Wildlife Carers Network volunteer Lyn Manuel with a black swan cygnet in a holding pen at Forrestdale Lake Nature Reserve.

Litter bugs beware

A RECORD number of Western Australians have signed up this year to become litter reporters under the Keep Australia Beautiful Council's (KABC) program.

KABC Program Manager Jennie Anderton said 144 people registered with the Litter Reporters program in February taking the total number of litter reporters in the State up to 3,068.

"The number of litter reporters has been gradually building up during the past four to five years and this year's registration has just topped it off," she said.

"This is the highest number of litter reporters we have ever had and it is very encouraging."

According to last year's National Litter Index, WA was the most littered State, with the highest figures in Australia in both litter items counted and volume of litter per 1,000 square metres.

In 2008, KABC received more than 5,000 litter reports, of which 85 per cent were reporting cigarette butts being dropped from vehicles.

"There certainly is room for improvement and if more people are aware that there is a chance they will be reported for littering, this will help to discourage them," Jennie said.

Jennie said February's rise in litter reporter registrations coincided with the bushfires that ravaged Victoria.

"There does seem to be a heightened awareness of the fire risk cigarette butts can pose," Jennie said.

"According to Fire and Emergency Services Authority figures between eight and 12 per cent of fires are started by cigarette butts."

Once registered, litter reporters are provided with a kit including postage paid litter report cards and information on how to report. The information provided by litter reporters normally results in the issuing of an infringement notice to the offender with fines ranging from \$75 for cigarette butts, to \$200 for other types of litter.

To join the 3,068 Western Australians who are part of the litter reporter scheme, contact KABC on 6467 5129 or email kabc@dec.wa.gov.au to be sent a registration form or visit the KABC website at www.kabc.wa.gov.au/

DEC arms Kimberley community against invading cane toads

KIMBERLEY residents received extra ammunition in the fight against cane toads with the establishment of live cane toad drop-off points and the distribution of Cane Toad Packs and information materials.

As part of a range of State Government measures announced by Environment Minister Donna Faragher in January to help the community deal with the invasion of cane toads, DEC teamed up with the Shire of Wyndham-East Kimberley and the Kimberley

Vet Centre to set up sites for the Kununurra community to safely dispose of live toads.

DEC Kimberley Regional Manager Daryl Moncrieff said up to two-thirds of suspected cane toads were actually native frogs and encouraged the local community to contact DEC's Kununurra office for assistance with identification, or to bring the suspected toads to the drop-off point.

"The toads can be dropped into a chute which leads to a specially designed holding cage," he said.

"DEC officers will check the cages and humanely euthanase cane toads and release any native frogs into suitable environments around the Kimberley.

"Animals may spend a weekend in the holding cage before being removed for identification and disposal, so the cage is fitted with water and shade cloth."

DEC has also developed information materials that were distributed through a letterbox drop to residents of Kununurra, Halls Creek and Wyndham, and a Cane Toad

Pack to arm the community with information and equipment to cope with cane toads.

"The packs contain valuable advice on keeping children and pets safe from cane toads and how to handle and correctly identify them," Daryl said.

"It will also help inform the community about the differences between cane toads and native frogs."

The Cane Toad Packs are free and available from a number of locations in Kununurra.



Corrin Everitt joins the department as State Cane Toad Initiative Community Coordinator. Photo - Sandy Fleisher

Corrin joins the fight

DEC's new state Cane Toad Initiative Community Coordinator Corrin Everitt comes from a background in natural resource management in the rangelands and has worked and lived in remote areas of northern Australia for the past eight years including carrying out research on Cape York Peninsula.

She was attracted to the post for the opportunity to work with different groups fighting for the same cause.

"The job is about coordinating and encouraging information exchange on cane toad management and control across the whole community," she said.

"The position will involve working with the key stakeholders involved in cane toad management. That

includes community groups Kimberley Toad Busters, Ord Land and Water, and Stop the Toad Foundation, as well as local government, DEC and other State government agencies.

"It is also about facilitating the implementation of the actions identified in the Draft State Cane Toad Strategy.

"I really believe in the strengths of collaboration and coordination. You can achieve so much from working together.

"And while I don't think we can stop cane toads from spreading further west in WA, I do believe we've got the opportunity to put in place measures to protect the biodiversity in the Kimberley from the impacts of cane toads."

No barriers for Melissa

THE newest employee in DEC's Shark Bay District, Melissa Charles, hasn't let a mild learning and physical disability get in the way of success.

The enthusiastic 26-year-old has completed work experience, volunteer hours and a Certificate I in business studies.

She has now joined the Shark Bay office as a casual administration assistant.

Shark Bay District Parks and Visitor Services Coordinator Tricia Sprigg said Melissa first joined the department on a five-month structured work placement in 2001.

She then continued to do eight hours a week volunteer work, entering park information and assisting administration staff.

"Melissa received an award for Volunteer of the Year from the Environment Minister in 2003 and has continued to develop her skills by completing external studies

through TAFE," Tricia said.

"This year we were able to allocate some funds to pay Melissa for four hours a week to assist administration staff with office management as well as maintain the Shark Bay volunteer database and park entry data.

"She's a real asset to the team."

DEC is also supporting Melissa with furthering her training in a Certificate II in Business studies through TAFE flexible learning.

And DEC staff have been liaising with the Disability Services Commission local area coordinator to ensure Melissa's work stations and work conditions are suitable for her needs.

Melissa said she really enjoyed working in the Shark Bay office.

"I like working at DEC because it is fun working on the computer and I like having morning tea with the DEC staff and next door at the bakery," she said.

"My favourite task is helping with the mailing and banking."



DEC Shark Bay District Manager Brett Fitzgerald, new employee Melissa Charles and Disability Services Commission local area coordinator Shellee Doncon.

Photo - DEC

Cultural awareness for campground hosts

A GROUP of DEC's campground hosts were treated to a professional protocol day in Walyunga National Park late in 2008.

The volunteers reside in national parks across the State for up to several months each year, guiding visitors and maintaining campgrounds.

About 25 campground host volunteers attended the protocol day, led by Delvene Cornwall and Thomas Dimer from DEC's Aboriginal Heritage Unit.

DEC Community Involvement Coordinator Marg Buckland said the day not only provided an enjoyable experience for DEC volunteers, but also helped to heighten their appreciation of Aboriginal culture.

"The volunteers had the opportunity to learn about Aboriginal history, culture and see sites of Aboriginal significance," Marg said.

"They learned about Aboriginal seasons, the importance of distinguishing between male and female Aboriginal stories and sites, how traditional shelters were formed, bush tuckers, how instruments were made and more.

"They also tried out some traditional dances, which certainly provided a few laughs.

"In all, the day really opened the volunteers' eyes to the depth of Aboriginal culture, especially in a culturally rich place like Walyunga National Park."

Delvene said the day was an excellent way of fostering respect for Aboriginal culture.

"We also conduct cultural awareness days for DEC staff to help share our culture," Delvene said.

"They are a way of coming together, sharing stories and information and having a fun day out."

Focus on recovery of Carnaby's black-cockatoo

SEVENTY-six delegates gathered at DEC's Kensington training centre in December to discuss research and conservation activities related to Carnaby's black-cockatoo.

Carnaby's black-cockatoo is a species found only in south-western Australia where its numbers have been in decline, largely as a result of clearing of native woodland and sandplain vegetation.

The Carnaby's symposium was organised by DEC, Birds Australia WA and World Wide Fund for Nature (WWF) Australia to enable individuals and organisations with an interest in the black-cockatoo to find out about work being done in the field.

DEC Regional Leader Nature Conservation David Mitchell, who is also chair of the Carnaby's Black-Cockatoo Recovery Team, said Carnaby's black-cockatoo was an unusual threatened species because it was a highly visible, noisy and charismatic part of the urban environment.

"Most people see and know them. However, this makes it difficult to demonstrate that they are indeed threatened with extinction," he said.

"These birds are long-lived and many of

the birds we are seeing are the older ones returning year after year. We do not know how well they are being replaced by young birds.

"We are hoping the sight of black cockatoos won't just become a childhood memory for our kids."

Topics covered during the symposium included conservation, monitoring, landholder insights, cockatoo rehabilitation, compliance and captive breeding, research and future directions.

DEC Principal Research Scientist and Birds Australia WA representative Allan Burbidge said there had been an increase in work being done to conserve the cockatoo. He said it was important for people to keep up with developments and to maintain effective networks.

"The current recovery plan needs to be brought up to date and delegates have the opportunity to contribute to a new recovery plan for the endangered species," Allan said.

The day after the symposium, 30 delegates took part in a workshop to develop a list of prioritised recovery actions for the species as a framework for a new recovery plan, future

projects and to raise awareness about the plight of the bird.

The symposium and workshop were successful at bringing together a broad range of stakeholders, many of whom had not previously met. Michael Roache from WWF-Australia said the workshop was timely in that it enabled participants to discuss the major challenges facing the cockatoos, and begin to develop collaborative partnerships to help address the issues.

Attendees included Denis Saunders (CSIRO Canberra), Michael Roache (WWF-Australia), Bruce Haynes (Birds Australia WA), Dr Andrew Weavers and other officers from the Commonwealth Department of the Environment, Water, Heritage and the Arts, as well as representatives from DEC, natural resource management groups, WA Museum, the Urban Development Institute of Australia (WA), The University of Western Australia, Curtin University of Technology, Edith Cowan University, Murdoch University, Perth Zoo and other stakeholders.

The symposium had financial support from DEC, WWF-Australia, Birds Australia WA and the Avon Catchment Council.



Symposium organising committee members DEC Senior Research Scientist and Birds Australia WA representative Allan Burbidge (left), Michael Roache from WWF-Australia (centre) and chairman of the Carnaby's Black-Cockatoo Recovery Team David Mitchell (right) with Harmony.

DEC volunteers celebrated at awards ceremony

DEC celebrated the efforts of its dedicated army of volunteers with an awards ceremony at Matilda Bay in December.

The annual awards recognise the efforts of volunteers who go that extra mile to help the department care for the environment.

DEC Community Involvement Coordinator Marg Buckland said the awards were a way of expressing DEC's appreciation for the countless hours of volunteer help it receives.

"We have 8,800 volunteers on our books - people who freely give up their time to help with everything from wildlife rehabilitation and campground hosting to manning our telephone hotlines and helping with displays," she said.

"We really are indebted to them for their generosity, their good natures and their willingness to help us work to protect the environment."

Volunteer of the Year awards went to Shoalwater Island Marine Park volunteer June Gaynor, campground hosts Gwen and Norm Cole and Trevor Nicholls, who volunteered to help with the Conservation and Landcare display at the Perth Royal Agriculture Show.

By Samille Mitchell

Penguin Island Volunteer Coordinator Erin Briggs, who nominated June for the award, said everyone knew it would be a productive day when June was rostered to volunteer.

"Her enthusiasm and energy are commendable and if there are no jobs to be done June will find one somewhere," Erin said.

"June's commitment and involvement continue after hours on her days away from the island - she often calls us through the week with reports of injured wildlife and issues regarding the marine park and its fauna. She is also involved in caring for injured seabirds."

Cape Range National Park Ranger Chantelle Lusty said both Norm and Gwen Cole had played an essential role in managing the campgrounds in Cape Range National Park, with 19 years of volunteering behind them.

"Over the years there have been many people pass through Ned's Camp and become life-long friends with the Coles - so much so, that many people travel across Australia just to have

annual holidays with them," Chantelle said.

Trevor was nominated by the Community Involvement Unit, for his involvement with the Perth Royal Agriculture Show Landcare and Conservation display.

"Trevor is also a wildlife rehabilitator and a Yanchep National Park volunteer," Marg said.

"Trevor has been volunteering at the Landcare and Conservation display since 2003 and is always ready to take on extra shifts on the roster as a project supervisor. He helps with construction before the show opening, and supports each of the contributors at the display working in all facets of the Landcare and Conservation display."

Outstanding Service Awards went to Friends of North Lake members Neil Goldsborough, Adele George, Lynne Steele, Viharo Wood, Ray Robertson and Terry Robertson as well as Bibbulmun Track volunteer Lesley Kerr, Yanchep National Park volunteer Andrew Greaves, Animal Control agent and Wildcare helpline volunteers Lesley and Glen Goudie and Shoalwater Islands Marine Park volunteers, Meg and Stan Salazaar and Marlene Lievens.



Campground hosts Gwen and Norm Cole were among four people to receive Volunteer of the Year awards from Environment Minister Donna Faragher. Photo - Terrace Photographers

Pathways back on track

DONNA Virgo has recently taken the reins of DEC's Pathways Program - an initiative designed to attract and retain a strong Conservation Employee workforce.

Pathways Program is a joint DEC and Australian Workers' Union (AWU) initiative that was created to develop and implement training and recognition of prior learning in Conservation Employees.

Conservation Employees are responsible for a wide range of jobs that are crucial to DEC's business, such as prescribed burning, firefighting, feral animal control, weed control and reserve management.

As AWU Facilitator - Conservation Employee Career Development, Donna will be responsible for facilitating the Pathways Program. She will work with DEC's Learning Development Manager and AWU training coordinators Patrick Foley



Donna Virgo.

(Swan Region), George Laws (South West Region) and John Jackway (Warren Region), who have been appointed to maintain a consistent standard of Conservation Employee career development.

Donna said she would be working on a program to recognise the prior learning of Conservation Employees that are matched to the department's needs and resources.

"Over the next few months my priorities are to develop a communications plan on the future direction and actions of the Pathways Program, to liaise with key stakeholders in the Implementation and Advisory Committee and create new Job Description Forms and job profiles that are matched to the AWU levels and Award definition," she said.

"I will also be investigating ways to keep records of Conservation Employees' skills, training and competencies, and assessing the department's development plans to meet its corporate and district needs."

Director Regional Services Peter Dans met with Conservation Employees last year and advised them of his strong support for the program.

"The Pathways Program is fundamental to securing the ongoing development and retention of our Conservation Employees and I am strongly committed to overseeing the successful delivery of the program," Peter said.

Contact Donna regarding any career development matters or for more information on 9840 0400 or donna.green@dec.wa.gov.au.



DEC staff at the Regulatory Officers Training Course. Photo - DEC

Environmental inspectors awarded

ENVIRONMENTAL Inspectors Brendan Hewson, Colin Scrimshaw and John Ottaway have been recognised for their commitment to continuous improvement and long standing service.

Acting Director of the Environmental Enforcement Unit, Tony Potts presented the inaugural inspectors with a shield at a Regulatory Officers Training Course ceremony, where a number of staff were appointed as 'Inspectors and Authorised Persons', under the Act.

"It is an honour to be able to recognise the achievements and years of dedicated service these officers have provided. Importantly, although the shield recognises the history of our organisation, it also acknowledges the way forward by incorporating the current DEC inspector badge," Tony said.

Brendan, Colin and John, were appointed as inspectors in 1987 and were updating their skills and knowledge of legislative changes. A fourth inaugural inspector, Peter Skitmore, has since been recognised for his ongoing commitment and dedication.

Brendan expressed his appreciation at receiving the award.

"It was quite a surprise, and a very welcome one,

to receive such acknowledgement and recognition from the department after many years of just 'doing our jobs'," he said.

"I have always believed in showing support for colleagues during my working career and it's nice to have that sense of appreciation reciprocated."

Training programs were organised to cater for the influx of new staff who joined DEC after two recruitment drives were held for Industry Regulation Branch in 2008. A presentation ceremony was held at the end of this training, where authorisation cards and certificates of completion were given out by Director Environmental Regulation Division Alan Sands.

"It is great to see such commitment to regulatory training in our department. The training undertaken by our staff through this program will equip them with the skills and knowledge necessary to undertake DEC's regulatory function," Alan said.

More than 80 staff attended various parts of the training program, which incorporated a four-day Industry Regulation induction component and a 10-day, competency-based Regulatory Officers Training Course. Forty-five staff completed the whole program.

Beach clean-up success at Salmon Beach

DEC Warren Region staff helped Year 11 Manjimup school students clean-up Salmon Beach in D'Entrecasteaux National Park in December.

Staff also led the student effort to remove weeds and rubbish at the King Jarrah recreation site in the park.

While Salmon Beach looked clean at first glance, the students found a lot of rubbish as they scoured the beach for debris.

The largest item unearthed was a hefty marine rope weighing about 50 kilograms. Other items removed from the beach included a large metal drum and fluorescent light tube still intact. In total, more than 120 kilograms of debris was cleared from the beaches.

DEC's Warren Region Parks and Visitor Services Coordinator Tim Foley hailed the clean-up a big success and hoped students would apply what they had learnt in their everyday lives.

He said the students were surprised at the volume of debris

collected from the beach and bush and felt a huge sense of fulfillment from their achievement

"The parks and reserves of the State belong to everyone so we all have a responsibility to look after them," he said.

"I hope the experience of both the beach and bush clean-up will raise awareness among those involved of the impacts that we humans can have on the environment and demonstrate that we can do something about it."

The clean-up was part of the Community Service Program, which started in 2007 in all Western Australian schools. As part of the program, students contribute a minimum of 20 hours of service to the community, typically in Years 10 and 11.

Completion of the 20 hours of service is required to achieve the Western Australian Certificate of Education at the end of Year 12.

The success of the clean-ups mean similar exercises will be conducted in other locations throughout the region in the future.



Manjimup students cleaning up in D'Entrecasteaux National Park. Photo - DEC

US hazardous materials experts in Perth

FIFTEEN DEC officers spent time upgrading their skills in dealing with hazardous materials and responding to emergencies under the guidance of four members of the United States Environmental Protection Agency (USEPA).

This is the third time the team of US experts has visited Western Australia at the department's invitation.

As well as running the course, which covers hazardous material theory, pollution detection equipment, protective gear and practical experience, the US experts also assessed DEC officers' ability to conduct



Environmental Officer Scott Jenkinson gets a helping hand from Pollution Response Officer Peter May to don the protective clothing and breathing apparatus required when attending an incident involving hazardous materials.

the training course. The USEPA-accredited course is recognised internationally.

DEC officers attending the week-long course held at FESA's Forrestfield training centre included four from the department's specialist Pollution Response Unit (PRU), one from the Contaminated Sites Branch and 10 regional staff from Esperance, Albany, Swan Coastal, Kwinana, Booragoon and Goldfields.

The US experts' visit is part of a program to ensure DEC staff are well trained and up to date with the latest developments in the field.

The PRU represents DEC on State hazardous materials and anti-terrorism committees, and DEC represents WA on the Federal National Counter Terrorism Committee's Site Decontamination Subcommittee.

USEPA on-scene coordinator and trainer Richard Martyn said in some ways DEC's PRU team was ahead of the USEPA.

"Some of the equipment is better than we have and when I get back I will be looking into getting the technology [that DEC has] that allows for real-time monitoring," he said.

Members of the PRU who had already completed the course attended a refresher course while officers new to the PRU underwent training in advanced sampling; air monitoring for emergency response; incident management, theory and examples; site decontamination and laboratory practical exercises. They also took part in a multi-agency tabletop exercise.

Big Day Out still going strong

By Catherine Jack

THE Big Day Out went ahead this year after DEC approved an application to hold the event at the Claremont Showground. The approval followed the Claremont Town Council's initial rejection of the concert.

With the exception of 2008, the Big Day Out promoters have always applied directly through DEC and, after their application for the 2009 event was rejected by the Claremont Town Council, the promoters re-applied through the department.

After DEC approved the application Environment Minister Donna Faragher set the conditions for the event, which included setting the starting and finishing times and noise levels to be met, monitoring the noise and providing a noise complaint phone line for residents.

DEC Environmental Noise Officer Emma Bridgeman said noise regulation staff had monitored the event in past years and used community noise surveys and local



Environmental Noise Officer Emma Bridgeman at the Big Day Out.

government noise complaint surveys to establish what noise levels were appropriate.

"The noise levels set for the event were the same as the past two years and represent a balance between an enjoyable day for WA youth and a reasonable level of amenity for the residents surrounding the showground," she said.

All staff from the Noise

Regulation Branch were present on the day to monitor noise levels and ensure conditions of approval were complied with.

"We worked with the Big Day Out's acoustic consultants on the day to ensure the noise impact on surrounding residents was minimised as far as practicable," Emma said.

Eco Education centre a winner for the environment

THE Canning River Eco Education Centre, located in Canning River Regional Park, received an Excellence in Energy Efficiency Award at the 2008 Master Builders Excellence in Construction Awards.

DEC played a key role in project managing the establishment of the centre, which has been open since June 2008 and provides the perfect setting for schools, environmental groups and the community to learn about the environment of the Canning River.

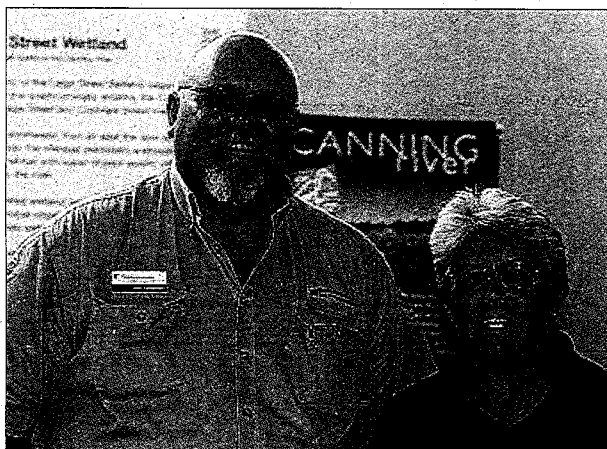
Eco Education Centre Project Manager Jacinta Overman said the building was constructed with sustainability in mind and involved a number of DEC staff.

"It was a very collaborative project between DEC, the City of Canning, the Swan River Trust, Department of Education and Training and the community, with great support from Department of Housing and Works, the architects and contractors," Jacinta said.

"The whole project was very positive because the people involved were keen to see the centre built to support the volunteer groups in the park, and provide educational services to schools in the surrounding area."

The planning process incorporated consultation with Aboriginal elders of the area and their advice was incorporated into the design and location of the centre along the riverbank.

In designing the building, Paterson Group Architects and



DEC Reserves Ranger Tony Eddleston with Jo Stone from Canning River Regional Park Volunteers.

the project's working group aspired to set the building into its parkland environment and complement the existing facilities at Kent Street Weir.

In keeping with its role as an environment centre, the facility features simple but effective methods of sustainable design and energy efficiency. From its orientation on the site, which was

decided based on shading and prevailing winds, to the use of insulation and natural air ventilation systems, the development presents a great model of sustainable design to the community.

Other features of the building include water-minimisation techniques, including slow-running taps, an on-site wastewater treatment system and capturing stormwater to eliminate erosion of the riverbank.

DEC staff involved in the establishment of the centre included Interpretation and Communications Officer Johanna Riddell, Interpretation and Visitor Information Coordinator Gil Field and Design Studio Officer Shaun Bunting, who together created the interpretative display at the centre. Policy Officer Tania Donovan, Principal Policy Officer Tim Bowra and the Regional Parks works crew helped community groups with revegetation along the riverbank.

The Excellence in Energy Efficiency Award was presented in July 2008 as a part of the Master Builders Excellence in Construction Awards, which are judged by an independent panel and recognised by building industry professionals and government.

"The project was great to work on because it involved many of the volunteers who work in Canning River Regional Park, who now use the building regularly for their meetings and events," Jacinta said.

Tuart woodlands come alive in new children's book

A BEAUTIFULLY illustrated new children's book *Tuart Dwellers*, which tells the story of 'a day in the life' of a tuart tree, was launched in December.

Published by DEC, *Tuart Dwellers* explores many of the mammals, birds and other creatures that live in tuart woodlands.

Written by primary school teacher and nature lover Jan Ramage, and illustrated by prominent consultant botanist and artist Ellen Hickman, *Tuart Dwellers* has been published as part of DEC's community involvement in conserving tuart trees.

The tuart tree is a large, magnificent woodland tree and its associated vegetation provides important biological and ecological values and key habitats for many animal and fungi species. This book celebrates the diversity, colour and ingenuity of the natural world and shows children how important the woodland is to the many kinds of wildlife that depend on it.

There has been an increased focus on tuart woodlands in the past few years, primarily as a result of the significant decline in these ecosystems in the Yalgorup area on private lands and parts of the conservation estate.

By Catherine Jack

Before European settlement, there were more than 112,000 hectares of tuart woodlands but this has been reduced to about 30,000 hectares, largely due to the removal of woodlands for urban, industrial and agricultural development.

Director of Strategic Development and Corporate Affairs Ron Kawalilak said books like *Tuart Dwellers* played an important role in engaging young readers in conservation issues.

"*Tuart Dwellers* is not only entertaining, with great illustrations, it will also educate and inspire its young readers," Ron said.

Tuart Dwellers was produced by DEC in association with Janine Drakeford of Benchmark Publications and designed by Sandra Nobes of Tou-Can Design. The consulting editor was Amanda Curtin.

Tuart Dwellers is available through leading bookstores and DEC's online bookshop at www.dec.wa.gov.au/shop.



*Author Jan Ramage and Environment Minister Donna Faragher with a Year 6 class at Kapinara Primary School at the launch of *Tuart Dwellers*.*

Penguin Island penguin finds new home

A BABY penguin from the DEC-supported Penguin Experience – Island Discovery Centre has been given a new home at the Perth Zoo.

The little penguin, or fairy penguin, was born in The Penguin Experience – Island Discovery Centre on 18 June and named 'Pip' as she is a Penguin Island penguin.

The discovery centre is located on Penguin Island, 50 kilometres south of Perth. There are currently 10 penguins that call the centre home. These penguins were taken in after being injured or abandoned by their parents as chicks and cannot return to the wild.

DEC Penguin Experience employee Jo Usher said penguins were primarily monogamous birds and mated for life.

"Pip's parents, 'Geri' and 'Piggy' have been happily 'married' for years and no-one was surprised when the couple hatched a chick for the fourth time," she said.

"The penguins generally lay a clutch of two eggs, which

take 35 days to incubate. For penguins, raising chicks is a shared responsibility between both parents and Geri and Piggy took turns in keeping the eggs warm."

Baby Pip was looked after for nine weeks until her wings and feathers were fully grown and she was ready to move to the Perth Zoo's penguin enclosure.

Known for liking his food, Pip's father Piggy has been at the centre from its opening in 1996, when he was recovering from malnutrition. Piggy is now well looked after and currently holds the record for eating one kilogram of fish in a day.

Pip's mother, Geri, was brought to the discovery centre after being found in Geraldton where she was tangled in fishing line and starving. She was rescued and brought to the centre where she has been happily living for the past six years.

Penguin Island is home to the largest colony of little penguins on the west coast with a population of around 1,200.

Have you been involved in Ribbons of Blue?

THIS year, Ribbons of Blue is celebrating its twentieth birthday and everyone who has been involved in the program can be a part of the celebrations.

As part of the twentieth year celebrations, Ribbons of Blue is seeking stories from people who have been involved in the program, with some of the stories to be published on its website.

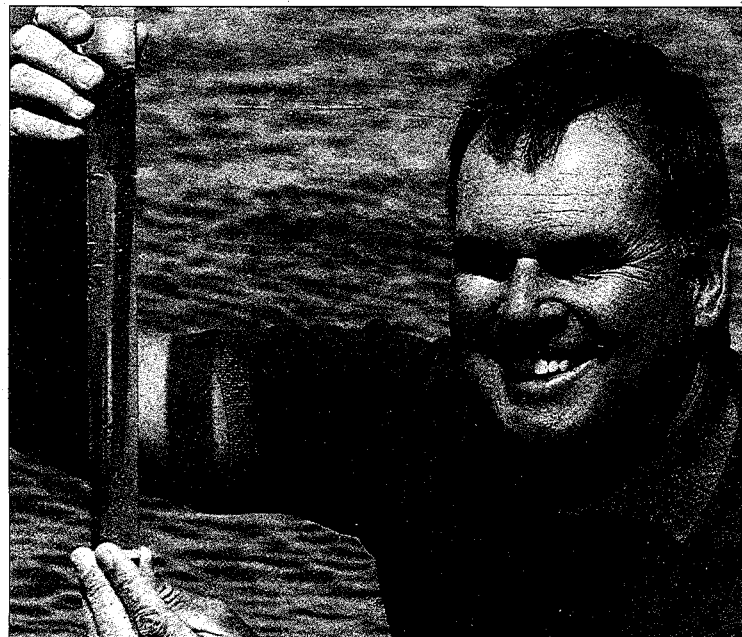
Stories can come from people who have experienced the program as a student, teachers who have coordinated the program into school curriculum, community groups or anyone who has been involved with Ribbons of Blue over the years.

Since beginning as a pilot project in 1989, about 160,000 students, 6,000 teachers and 230 community groups have visited more than 700 sites to monitor water quality.

Ribbons of Blue has also helped hundreds of community groups collect water quality data to help them contribute to managing their local catchments.

To contribute a story or picture, contact Ribbons of Blue State Coordinator Richard Olive at richard.olive@dec.wa.gov.au or on 6467 5127.

To keep up to date with the activities planned to celebrate the twentieth anniversary year, visit www.ribbonsofblue.wa.gov.au



Ribbons of Blue State Coordinator Richard Olive.



Tony Friend releasing one of the captive-bred numbats at Cocanarup Timber Reserve near Ravensthorpe.

Numbats get a helping hand

SIX captive-bred numbats from Perth Zoo and seven wild numbats from Dryandra Woodland were released into Cocanarup Timber Reserve near Ravensthorpe as part of DEC's Western Shield wildlife recovery program.

WA's native mammal emblem, the numbat, has been classified as a vulnerable species on State and national threatened species lists but was recently elevated to endangered in the World Conservation Union Red List of Threatened Species.

DEC Principal Research Scientist Tony Friend, who coordinated the release of the 13 numbats, said they were constantly under threat from native and introduced predators, particularly birds of prey, carpet pythons, foxes and cats.

"Cocanarup Timber Reserve was chosen as a numbat translocation site as it is baited each month for fox control under the Western Shield baiting program and is an area of eucalypt woodland with

good densities of hollow logs and termites, both of which are required by numbats," he said.

"Two adult females, six sub-adult males and five sub-adult females were released into Cocanarup – the third release of numbats at the reserve since 2006."

The translocations have all taken place in December, which enables the numbats to be settled into their new homes in time for the mating season in mid-January.

"There have been several recent sightings of an uncollared numbat at Cocanarup, most likely the progeny of a translocated female numbat, which have caused great excitement and indicate that the translocation is working."

Funding for the translocation is provided by the Western Shield Translocation Plan and Federal Government Natural Heritage Trust funding through South Coast NRM.

Karijini Eco-retreat wins Tourism Awards

AFTER winning its category in the 2008 Tourism WA Awards, Karijini Eco-retreat went on to compete in the 2008 QANTAS Australian Tourism Awards announced in February.

Located in the heart of the Pilbara Region, the Karijini Eco-retreat was a favourite at the 2008 Tourism WA Awards winning gold, silver and bronze across three different categories.

The retreat received the gold award in the Eco-Tourism category, silver in Indigenous Tourism and bronze in Unique Accommodation.

DEC staff played a key role in the establishment of this world-class retreat which features sustainable accommodation, solar power, water-efficient toilets and environmentally friendly waste disposal systems.

The award-winning Karijini Eco-retreat was also one of DEC's submissions to the 2008 Premier's Awards where it featured as a finalist in the Sustainable Management of the Environment category.

The Tourism WA Awards also honoured the Bibbulmun Track, which won bronze in the Tourist Attractions category.

International interest for WA fire-loving insects

A COLLABORATION between DEC staff and Professor Helmut Schmitz from Germany's Bonn University has resulted in the eighth annual survey of Western Australian fire-loving insects.

During forest fires, most insects and other animals flee in all directions, flying, running and crawling to avoid the flames. But there are exceptions, like some beetles and flies in WA's south-west that flock towards the smoke and still-burning trees.

Professor Schmitz and his team from the Bonn University's Institute of Zoology, and

By Catherine Jack

Professor Stefan Schuetz from the University of Goettingen, travel to Perth every summer and await bushfires in order to study a number of pyrophilic insects with highly developed sensory organs.

These fire-adaptive insects lay their eggs on recently burnt ground and trees and are able to detect infra-red radiation and bushfire smoke from up to 40 kilometres away.

Pyrophilic insects' behaviour during fires is difficult to study because it takes place in still-burning areas. DEC's Swan Coastal District Protection Officer Brian Inglis and District Fire Coordinator Mike Cantelo assist Professor Schmitz and his colleagues every year and ensure they are safe in the post-fire areas.

"Once Professor Schmitz and his team have arrived, we set them up with an office and computers and assist them in locating and safely going out to recent bushfire-affected areas," Mike said.

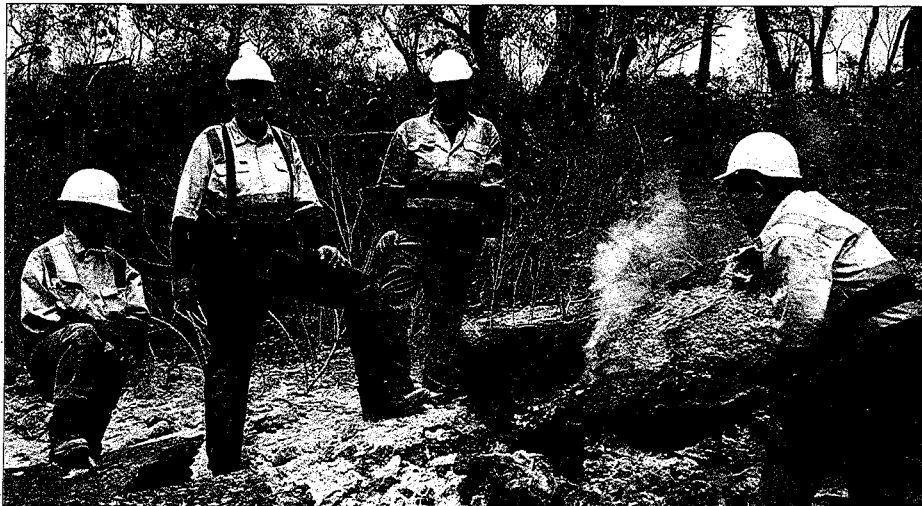
"We make sure they have personal protection gear including fire 'frog' suits, helmets, gloves and hand-held radios, and meet with them every morning to go over their schedule for the day."

With the assistance of DEC staff, Professor Schmitz's team is able to enter freshly burnt areas as soon as it is safe. With wood still burning and smoke in the air, they begin to collect and study these amazing creatures.

At a seminar at DEC's State Operations Headquarters in Kensington, Professor Schmitz explained how these little fire-adaptive insects had evolved with highly developed infra-red sensors, smoke detecting antennae and thermal heat receptors.

Professor Schmitz commented on how much could be learnt from nature's intriguing methods of fire detection.

"The fire-detecting sensors of the insects are so efficient they can't be improved upon."



(Left to right) Anka Schmitz, Helmut Schmitz, David Krombacher, and Stefan Schuetz surveying fire insects.

DEC puts dieback under the microscope

A TWO-YEAR DEC study is helping researchers understand the impact of dieback disease in the State's south-west.

The highly invasive disease – dubbed a 'biological bulldozer' – is caused by *Phytophthora cinnamomi*, an introduced soil-borne pathogen that kills plants by attacking their root system.

The disease, which spreads through water, soil and plant tissue, has infested hundreds of thousands of hectares in the south-west and is also widespread in the Perth metropolitan area.

About 2,300 of the south-west's 5,700 flora species are susceptible to dieback and the disease is considered a major threat to the State's biodiversity.

DEC Senior Research Scientist Chris Dunne said the research focussed on the impacts of dieback in the iconic Fitzgerald River and Stirling Range national parks.

"We have found that the pathogen, though originating from tropical rainforests in south-east Asia, is well adapted to cause high impact in these national parks, even more than the jarrah forest where the disease was

first observed causing mass collapse of forest sites," Chris said.

"Our research has found that the pathogen is able to adapt its behaviour in our native plant communities."

Chris said climate change also had the potential to speed up the spread of dieback.

"Extreme weather events, such as summer rainfall linked to northern cyclonic activity, can lead to a significant spread of dieback and a mass collapse in native vegetation communities," he said.

"The research provides an insight into how

the proposed scenarios of climate change across the south-west are likely to favour the increased spread and impact of *Phytophthora* dieback in Western Australia."

The ongoing study is being funded by DEC's Biodiversity Conservation Initiative, and the findings are expected to assist the development of a long-term strategy for managing dieback.

"The findings of this research will help land managers, DEC and others, to better understand the disease and how best to manage this devastating pathogen," Chris said.

Partnership sees Neale Junction campsite renewed

A COLLABORATIVE effort between DEC Goldfields Region staff and Track Care WA is seeing facilities improved at popular camping and four-wheel drive tracks in the region.

An idea sparked around a camp fire turned into a fully fledged working bee with DEC Kalgoorlie Reserves Officers Gary Hearle and Vanessa Jackson teaming up with 11 Track Care WA volunteers to create a new shelter at the Neale Junction camping area in the Great Victoria Desert.

The group decided to move the current Neale Junction campsite, situated at the intersection of Anne Beadell and Connie Sue

highways, 200 metres to the west. They also decided to move the rainwater tank shelter at the old Coolgubbin Camel Safari Camp to the junction, if time permitted.

By the end of the first day, a small information shelter was assembled and installed, drums for a long drop toilet were buried and the toilet frame was assembled. Day two saw the concrete pad for the toilet laid and the cladding painted by four volunteers while the rest of the work crew headed off to Coolgubbin.

The shelter was quickly broken down into various components so it could be loaded

onto a truck and transported back to the campsite. By the afternoon, the framework was reinstalled and half the roofing was on.

The next day, the shelter construction was completed, a new water tank was installed, a toilet structure erected and a trip to collect an abandoned trailer and rubbish was carried out.

On the last day, the group finished off the trimmings, moving barbecues and benches from the previous camping spot and collecting another abandoned trailer. During the project the group was encouraged along by visitors who came to see what was being done.

Gary said the development was a huge

success and the group had received positive feedback through the campground visitors book.

"It has eased pressure on the junction itself while installing facilities for the public in a more controlled and sustainable manner," he said.

"The skills and enthusiasm of the crew from Track Care WA were excellent and a pleasure to work with. The Goldfields Region is looking forward to the next collaborative project with the group."

Track Care WA aims to improve the environmental awareness of four-wheel drivers and maintain popular four-wheel drive routes.

Revegetation workshop educates Wongan Hills community

FARMERS and community members around Wongan Hills were given an insight into biodiversity conservation through a revegetation workshop run by DEC.

The workshop was held as part of the Wongan Hills Ecoscape project, which is an Avon Catchment Council (ACC) natural diversity project designed to protect and enhance local bushland.

DEC Avon-Mortlock District Manager Alan Kietzmann said participants learnt about revegetation principles to increase biodiversity on their properties, ACC agro-forestry opportunities and the benefits of conserving bush.

"Revegetation initiatives are important to protect and enhance native habitat through wildlife corridors and buffering remnants from adjoining threats and Wongan Hills is a biodiversity hotspot that is well-known for its flora diversity," Alan said.

DEC Wheatbelt Regional Nature Conservation Advisory Officer Peter White discussed the preparation and equipment needed for planting and how to achieve the best survival rate from seedlings.

"Both farm forestry and revegetation are underpinned by the use of best quality seed," Peter said.

"About 30,000 seedlings are being grown for the Wongan Hills Ecoscape, with all seedlings sourced from local seed and collected by DEC staff, and this will result in revegetation of 24 hectares."

ACC farm forestry officer Antony Crum also provided farmers with information about the ACC farm forestry offer for sandalwood hosts, oil mallees, brushwood and other native timber species. The farm forestry program complements biodiversity plantings and also manages threats such as erosion and salinity.

DEC Land for Wildlife officers Fiona Falconer and Mal Harper talked to farmers about the benefits of conserving natural bushland and described the value of bushland in contributing to the long-term survival of plants and animals and the sustainability of farms.

Participants then visited local farmer Peter Millstead, who has been planting trees on his farm for more than 50 years.

Mr Millstead shared his planting techniques and described the salt-tolerant plants that are surviving in highly degraded areas.

The Wongan Hills Ecoscape project is funded through the ACC, which is supported by both the State and Federal governments.

Mesopredator release review

DEC's four-year 'mesopredator release' research program has entered its final year.

The Science Division project seeks to understand firstly, if current fox baiting is effective at controlling foxes, and secondly, if it is effective, does that result in an increase in activity of feral cats who then become the predation problem?

DEC Senior Principal Research Scientist Keith Morris said the program was being undertaken in five areas in the south-west of WA.

Research Scientist Paul de Tores is working in the northern jarrah forest and examining the impact of fox control on feral cats as well as native predator and prey species. Senior Research Scientist Nicky Marlow is working at Dryandra woodland and assessing the uptake of baits by foxes, as well as the survivorship of woylies. Research Scientist Adrian Wayne is working in the Upper Warren area examining the causes of the recent woylie declines. Senior Research Scientist Dave Algar is demonstrating the effectiveness of cat baits at controlling both foxes and feral cats, while Keith is working at Lake Magenta examining the effectiveness of current wheatbelt fox baiting regimes.

Important outcomes from these projects will be the development of operational

guidelines for DEC staff to use to monitor the abundance and activity of feral cats and foxes, and more effective fox and feral cat control programs in the south-west.

Keith said the regular reviews of the program were conducted by an external expert panel comprised of Research Fellow Dr Andrew Burbidge, Dr Dave Choquenot (New Zealand Landcare Research) and Emeritus Professor Dr Peter Jarman.

He said the reviewers always provided helpful feedback to the scientists, the Science Division Director and the Director General, and they had contributed significantly to the success of the program.

"We now have quite clear indications that feral cats are a significant predator of some of our native fauna in the south-west, as we have known them to be in the arid parts of WA for some time," Keith said.

"Our main aim now is to develop a strategy to control cats – we have a cat bait that works in the arid zone, however more work is required to improve bait uptake by cats in the south-west and to overcome the potential non-target uptake issues by animals such as chuditch.

"While we have made significant progress towards understanding the interactions of foxes and feral cats in the south-west, there are still several issues that need resolving to improve fauna recovery in the south-west."

Trainee of the year flourishes with DEC

FIFTEEN-year-old Mariah Kara has been named Aboriginal Workplace Trainee of the Year at the 2008 Goldfields Workplace Learning Awards.

The workplace awards form part of the Goldfields Local Community Partnerships program, which places students between the ages of 13 and 19 in work and offers training and assistance during the transition period from school to full-time employment.

DEC staff from the Goldfields Region office saw the partnerships program as a great opportunity to encourage young people in the region towards a career with the department and expose students to the diverse areas of work available in DEC.

Mariah Kara was an outstanding candidate and, in early 2008, was recruited to work one day a week while studying Certificate I in Employment Skills at TAFE.

Since taking up her post she has enthusiastically gained experience in many areas of the Goldfields Region operations, including undertaking recreation site maintenance and inspections with the operations crew, learning office management skills with administration staff, assisting Wildlife

By Catherine Jack

Officer Pia Courtis in native animal rescues and working with industry regulation staff to inspect and prepare for pollution response.

Goldfields Reserves Officer Vanessa Jackson has worked closely with Mariah during sections of her traineeship and said she was looking forward to working with Mariah and the partnerships program again this year.

"Mariah as been a pleasure to work with, she's not afraid to get her hands dirty," Vanessa said.

"She has shown a lot of enthusiasm and a willingness to learn and work hard.

"The Goldfields Local Community Partnerships program and other traineeship programs are an excellent way to showcase DEC as an employer of choice to young people in our community.

"In addition we can provide them with valuable skills and show how a positive work ethic can really support their career."



Mariah Kara holding 'Ralph' the carpet python.



DEC Yanchep staff were surprised by the birth of a new, unexpected koala joey.
Photo - John Wheeler

Surprise baby koala

YANCHEP NATIONAL PARK has a new and unexpected member on the team – a baby koala.

The joey surprised volunteer Sam Wheeler when she noticed the unscheduled new arrival when she checked the koala compound.

While three other koala joeys were expected to be born this year, the fourth was a complete surprise.

DEC Marketing Coordinator Linda Cockman

said the new addition was a delight.

“Previously, three joeys – Menzies, a nine-month-old female, Jenga, a seven-month-old female and Kenji, a six-month-old male – were born and had been sighted regularly with their mums feeding on leaves,” Linda said.

“The three joeys were the only ones expected to be born this season so it was an absolute delight to find another.”

The joey is yet to be named.

Kimberley management plans

DEC has prepared an ‘issues paper’ for the future management of the **Ord River Nature Reserve and Parry Lagoons Nature Reserve**, which together cover more than **115,000 hectares of land between Wyndham and Kununurra**.

DEC Planning Officer Sarah Greenwood said the nature reserves represented areas of high conservation value and a plan was being developed to set the direction for management of the reserves.

“The reserves boast extensive natural features including mudflats, tidal waterway systems and a diverse mangrove community. They also support a number of waterbirds, saltwater crocodiles and migratory birds,” she said.

“A number of heritage sites in the area hold cultural significance for Indigenous and non-Indigenous people and it is vitally important that these and the natural assets are protected and conserved.

“In addition to its environmental values, the area caters for nature appreciation with many visitors taking part in bird watching and wildlife adventure tours.”

The planning area, in conjunction with the

lower Ord River waterway, is listed as the Ord River Floodplain Ramsar site under the Ramsar Convention on Wetlands, which aims to conserve valuable wetlands and contribute to sustainable development throughout the world.

“The Kimberley is a distinctive region and one that is facing many challenges in terms of development and conservation. This management plan will help ensure the region’s natural and cultural values are protected,” Sarah said.

The public comment paper outlines the issues occurring within and impacting upon the planning area as part of the initial phase of a management plan development process.

“Public consultation is important and I encourage all interested parties to take this opportunity to have their say,” Sarah said.

“DEC has the responsibility to manage parks and reserves on behalf of the people of WA and this management plan is another way of making sure everyone can be involved in the process.”

For a copy of the issues paper visit DEC’s website at www.dec.wa.gov.au/haveyoursay or contact DEC’s Regional office on 9168 4200.

Forty years of Tidy Towns

THE fortieth anniversary of the Tidy Towns – Sustainable Communities competition was celebrated at the launch of the 2009 awards.

Environment Minister Donna Faragher said the program was as relevant as ever.

“According to national statistics for 2008, the work undertaken through Tidy Towns initiatives by about 90,000 volunteers was valued at \$150 million, which is an amazing contribution,” she said.

Tidy Towns State Program Manager Gail Dodd said the competition, which has been running since 1969, was the flagship of the DEC-supported Keep Australia Beautiful Council (KABC). The program encourages group participation in recycling, litter prevention, water conservation and the celebration or protection of cultural and natural heritage.

“The fortieth anniversary of Tidy Towns is a time to celebrate the success of the awards, and the role DEC staff play in engaging regional communities,” Gail said.

“DEC staff are available to help entrants with their submissions and provide advice, particularly to those who have not been involved before.

“People may not be aware that almost any regional project can be considered a Tidy Town project.”

The competition’s name has changed in recent years from Tidy Towns to Tidy Towns – Sustainable Communities to reflect

its focus on communities reducing their impact on the environment and protecting and conserving their natural and cultural surroundings.

Last year’s Tidy Towns – Sustainable Communities winner, Kambalda, demonstrates the power of community spirit.

“Kambalda may not have the scenic beauty of other towns, but natural beauty is not what the judges are looking for,” Gail said.

“Kambalda demonstrated community pride through a range of projects including plastic-bag free Thursdays, a student-initiated recycling program, a prickly pear eradication program, tree planting and water conservation such as mulching, water-wise gardens and installation of grey water systems.”

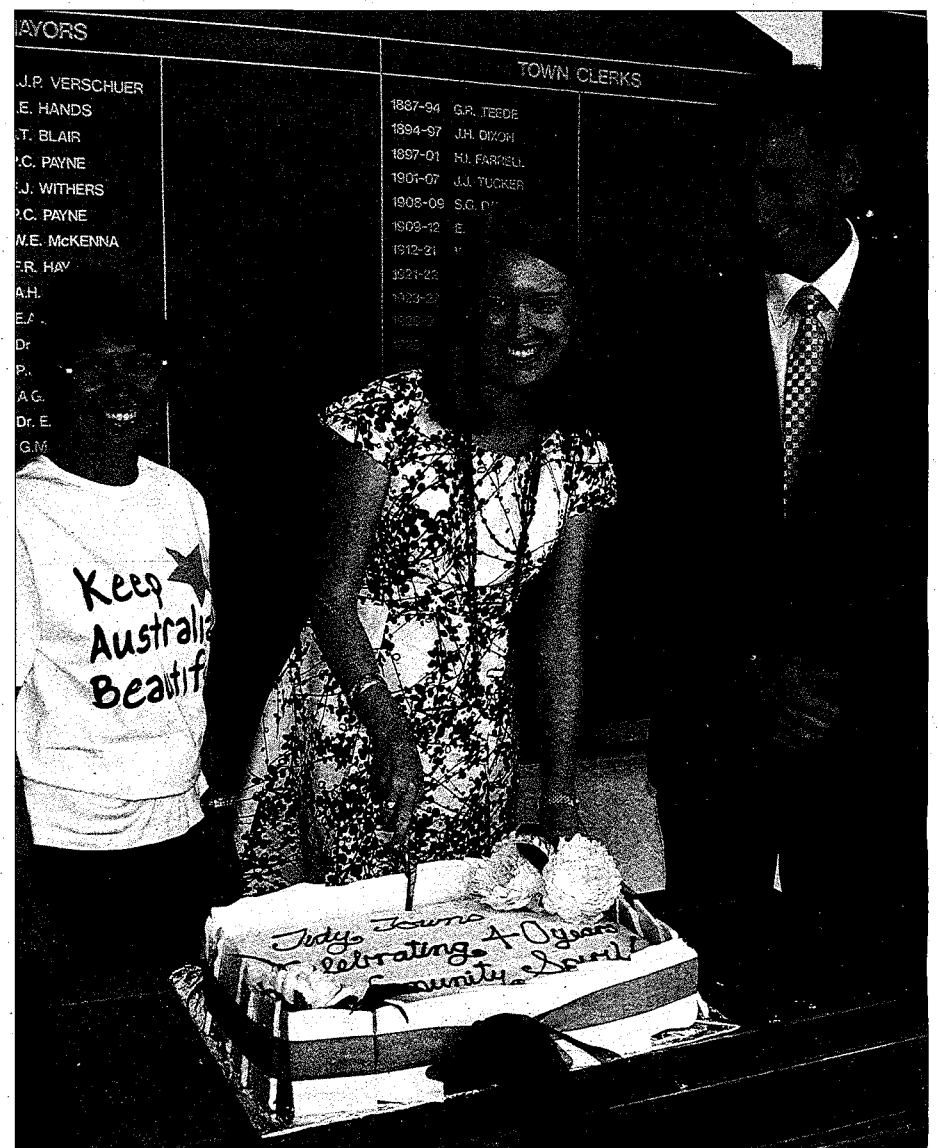
Gail said Indigenous cultural heritage was also important to the program.

“Entrants are encouraged to focus on what’s important for their communities, such as recording oral histories, language and traditions,” she said.

The theme for this year’s program is ‘Celebrating 40 Years of community spirit!’.

WA KABC Chairman Mel Hay thanked Western Australian communities that promoted sustainable living and worked to protect the environment for future generations.

For more information contact Tidy Towns State Program Manager Gail Dodd on 6467 5132 or email tidytowns@dec.wa.gov.au.



Tidy Towns South West Region Coordinator Cathy Campbell, Environment Minister Donna Faragher and KABC Chairman Mel Hay cut the 40th anniversary cake.

Nambung National Park land acquired after 40 years

A 650 hectare parcel of land in the boundaries of Nambung National Park has been purchased by the department, concluding a historic process which started nearly 40 years ago.

The property now belongs to the people of Western Australia and the process to have it formally included in Nambung National Park has been initiated.

Environment Minister Donna Faragher said the addition would consolidate the park and add important features such as the State’s most northerly grove of tuart trees and the final stretch of the Nambung River where it runs underground to the coast.

“This is a great outcome for the park and the region,” she said.

Negotiations to acquire the land, and effectively fill a hole in the park, began in 1969, when the former National Parks Board approached the owner with a view to buy the land.

An Environmental Protection Authority recommendation to purchase the privately owned land was endorsed by State Cabinet in 1976.

After CALM was established in 1985, regular contact was maintained with the owner and the land continued to be a ‘property of interest’ for the next 20 years.

In May 2007, an agent acting on behalf of the family approached DEC and negotiations were successfully concluded in November 2008.

Project Officer – Land Tenure Alex Errington, who first became involved with the proposed purchase in 1985, says it is a very satisfying result.

“Some of these valuable purchases can take a long time, but it shows what can be achieved with persistence and hard work.”

Nambung National Park is 250 kilometres north of Perth and includes the Pinnacles, which attract more than 250,000 visitors each year.

Year in review 2008

January

The year started as it ended – with fires. A fire that began on 28 December 2007 in Boorabbin National Park between Southern Cross and Coolgardie continued to burn. Tragically, three truck drivers died in the fire that wasn't declared safe until 9 January.

The fire focus then turned to Fitzgerald River National Park and Lake Shaster Nature Reserve on the south coast where a spate of fires broke out following lightning strikes.

Two updated handbooks were released during the month to assist commercial operators to provide tourism experiences on DEC-managed lands and waters.

DEC's Environmental Enforcement Unit was busy with prosecutions for illegal land clearing in Kununurra and in Kalgoorlie a gold mining company was prosecuted for causing environmental harm.

February

Keep Australia Beautiful WA staff had their hands full in February with the State finals of the Clean Beach Challenge, won by Scarborough Beach, as well as the launch of the inaugural Sustainable Cities Awards and the 2008 Tidy Town Sustainable Communities program.

In the Wheatbelt, the wild dog control program was boosted with the appointment of a trainee dogger and in the Midwest and Gascoyne, a feral goat control program got under way.

News about the status of the woylie in the south-west, however, was not encouraging. It was announced that numbers had declined dramatically in some areas, and that the woylie had been relisted as threatened.

Efforts to tackle greenhouse gas emissions took a step forward with the formation of an Independent Expert Advisory Group to oversee the first round of funding from the \$36.5 million Low Emissions Energy Development Fund, while in Kununurra the Kimberley Toad Busters received \$169,000 to assist their efforts to prevent cane toads reaching WA.

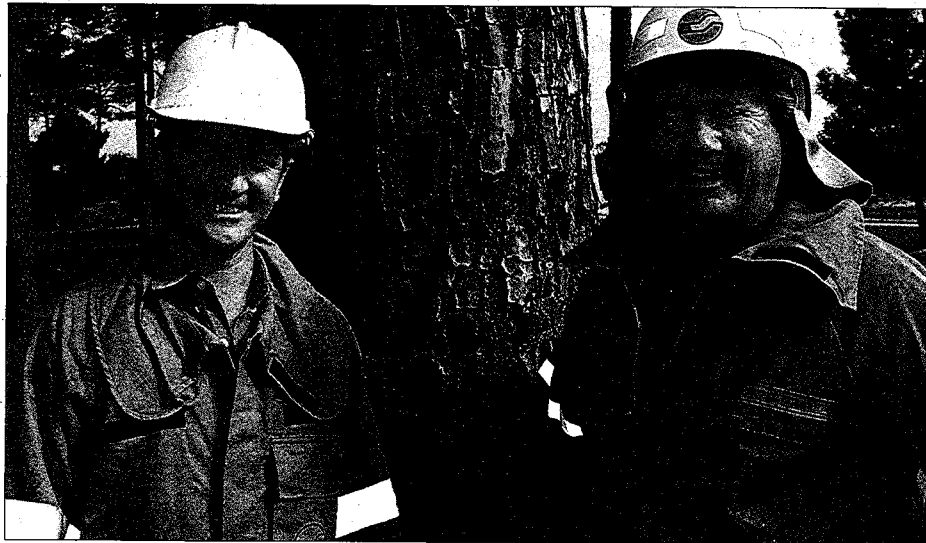
Six days after lightning started a fire in Kalbarri National Park that burnt 7,400 hectares, the park's inland gorges were re-opened. On the same day the Great Eastern Highway between Southern Cross and Coolgardie was re-opened after fire crews contained a bushfire south of the highway and southerly winds changed the status of a fire north of the highway in Goldfields Woodlands National Park.

Challenges of a different kind, unprecedented growth in the resources sector, led to the announcement of a wide-ranging review to streamline the State's environmental approvals process.

Tragically, a mid-air collision claimed the life of DEC Operations Officer Dan Kean and Exmouth pilot Bradleigh Roulston. The pair died when a fixed wing plane and a helicopter collided in Kennedy Range National Park near Gascoyne Junction while working in tandem to carry out a feral goat control operation. Dan was celebrated as an all-rounder who demonstrated commitment and talent in the 12 months he worked with the department. He was an exceptional community man, who had strong links to the local Aboriginal community and was heavily involved in a number of community projects and was a board member of the local Aboriginal Medical Service, a community coordinator at Burringurrah in the upper Gascoyne and a coordinator at the Mungullah community in Carnarvon. He left behind his partner Faye and son Aiden.

March

The world's first large-scale household program designed to help combat climate change was launched in March. The 'Living Smart' trial program provides 15,000 Joondalup and Mandurah households with practical information on how they can reduce greenhouse gas emissions at home and save up to \$2,000 a year.



Peter Gibson (left) and Mike Cantelo (right) travelled to South Africa in March to train local plantation managers in prescribed burning.

On a national scale, DEC became part of the new \$2.25 billion, Commonwealth Government 'Caring for our Country' program to revitalise Australia's environment and improve land management. The five-year program will revamp the Natural Resource Management program to replace the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality.

March also saw two of DEC's specialists in pine plantation fire management head to South Africa to train local plantation managers in prescribed burning. Wanneroo fire coordinator Mike Cantelo and Collie fire coordinator Peter Gibson spent two weeks in the country.

Back home, DEC joined forces with the Western Australian Police as part of a memorandum of understanding to exchange criminal intelligence and information.

On an operational front, DEC officers freed a pilot whale from pot ropes off Cervantes, monitored coral-eating snails in Ningaloo, amended licences dealing with brickworks emissions and took part in the 'WA on Show Exhibition' at the Perth Convention Centre.

April

In April, DEC's whale disentanglement team organised a forum on the latest whale rescue techniques. It attracted participants from around Australia. Ironically, the day before the forum, a juvenile humpback whale in poor condition died after seeking refuge in Two Rocks marina.

Further north, in Exmouth, DEC held a two-day course for wildlife rehabilitators. Twenty-five people from a wide range of age groups took part.

Planning began for marine conservation reserves along the Pilbara and Eighty Mile Beach coastline.

May

DEC welcomed a new face in May. CEO of Perth Zoo Susan Hunt joined the department as Acting Deputy Director General Environment, bringing with her a vast experience in organisational



DEC was on show at the 'WA on Show' exhibition. DEC staff, including (left) Sarah Melville and Marie Milagro, fielded inquiries from the thousands of show-goers over the long weekend in March.

management and corporate change. Susan stayed with the department until September.

May was good for threatened species with 22 Carnaby's black-cockatoos released at Yanchep National Park, the largest release of rehabilitated cockatoos in WA. Six critically endangered plant species were translocated including the prostrate flame flower (*Chorizema humile*) which has just 116 plants in the Midwest Region.

DEC efforts helped WA become the first partner in the Global Strategy for Plant Conservation to meet the target of 60 per cent of threatened plant species to be held in accessible collections. DEC's Threatened Flora Seed Centre now holds collections from more than 70 per cent of the State's threatened flora species.

Climate change and its potential impact on Ningaloo Marine Park was one of the issues examined at the second annual Ningaloo Research Symposium. Scientists and resource managers at the symposium also discussed the issue of escalating recreational use and tourism development.

WA community members had an opportunity to take part in air quality research and play a role in improving air quality management when they were invited to apply for Air Quality Management Community Grants.

On the regulatory front, the development of a new Enforcement and Prosecution Policy gave the department an improved means to promote and achieve positive environmental outcomes through compliance.

June

June marked the official opening of a \$425,000-expansion to DEC's bait manufacturing facility at Harvey, a crucial

part of the battle to save the State's native mammals. Staff spent five years testing and refining sausage-shaped baits, which kill introduced predators without harming WA's native fauna.

DEC issued a modified penalty of \$25,000 to a Hazelmere rendering company, after investigating odours from the plant. An infringement notice and environmental field notice were also handed to a Kenwick scrap metal business that discharged oily waste into the environment.

The DEC community celebrated the graduation of 23 men and women from the department's Graduate Development Program and the achievements of 10 Aboriginal trainees and one tertiary cadet through its Mentored Aboriginal Training and Employment Scheme (MATES) program at a ceremony in June. The event also acknowledged the recipients of study scholarships and awards.

Fire officers were under the pump with their prescribed burning program. They completed the early dry season program in the Kimberley, which began at Purnululu National Park in April and finished with burns on the Mitchell Plateau. A prescribed burn was carried out as part of a \$500,000 research program on the Gngangara Mound studying the aquifer and banksia woodlands.

Environment Minister David Templeman announced the next phase of the State Government's *Fertiliser Action Plan*, a key strategy to protect water quality and biodiversity in WA's rivers, streams and catchments, while ensuring agricultural productivity can be maintained.

As the financial year wrapped up, a review of WA's native vegetation clearing legislation was announced to improve processes and environmental outcomes and the City of Gosnells was named Perth's most sustainable city for 2008.

July

In July, DEC issued a public warning following reports that a three- to four-metre saltwater crocodile was on the loose in Onslow. Officers conducted a night survey of the Three Mile Pool on the Ashburton River but failed to locate any of the reptiles.

DEC also began receiving reports of silver gulls dying at Woodman Point. Within days, more than 250 had been found dead. They were sent for tests and autopsies in order to determine the cause of death.

A week later a baby humpback whale stranded at Bather's Beach in Fremantle attracted plenty of public attention after locals attempted to push it back out to sea before DEC wildlife officers arrived. The whale was guided to calmer waters but submerged and failed to resurface.



The 2008 DEC Graduate Development Program graduates were (back row, left to right) Grant Eikelboom, Craig Douglas, Peter Wnuk, Allan Madgwick, Roger Whitelaw, Chris Stewart, (middle row, left to right) Judy Dunlop, Amanda Schnell, Tiffany Fowler, Teagan Johnston, Rebecca Coyle, Brook Kalkyard, (front row, left to right) Natalia Huang, Monica Hunter, Gaynor Owen, Joanna Moore, Chantelle Lusty, Judith White and Cally Uren. Other graduates, not photographed were Nikki Cowcher, Sara Hands, Conor O'Neill and Sam Tonkin.

Year in review 2008

The Gilbert's potoroo also made the news following the completion of a predator-proof fenced reserve near Albany, to protect the world's most endangered marsupial.

Wildlife stories continued to dominate when loggerhead turtles, which had been tagged with satellite tracking devices at Ningaloo Marine Park, drew lots of media interest after the project proved successful in tracking their migratory paths.

A Mukinbudin resident received an \$8,000 fine after being charged for the unauthorised clearing of native vegetation from three properties in Mount Marshall, while a Kalgoorlie mining company paid a modified penalty of \$25,000 after approximately 4.5 million litres of tailings slurry was discharged into the environment.

Tuesday 22 July marked a significant milestone when DEC's new website went live. The launch of www.dec.wa.gov.au represented the end of the first phase of a mammoth communications and technical challenge to bring together all the content, services and applications of the former Department of Environment and Department of Conservation and Land Management into a single DEC website.

August

August was a busy month for DEC with the Nature Protection Branch continuing to receive reports of silver gull deaths. Testing and investigations were extensive, however, they proved inconclusive.

Meanwhile, 24 critically endangered western swamp tortoises were successfully released in the Moore River National Park and monitored to determine whether a population could be established there.

On August 7, Premier Alan Carpenter set the State election date for September 6 and caretaker conventions were put in place. Also on this date, seven conservation areas in the Perth hills were formally given Aboriginal names and collectively became known as the 'Parks of the Darling Range'.

With spring approaching, DEC and Main Roads WA developed a new set of roadside wildlife signs to be placed near lakes in the Perth metropolitan area where ducks, swans and turtles commonly try to cross busy roadways.

WA hosted the Inaugural Global Geotourism Conference in Fremantle, sponsored by DEC, while 18 senior staff from the Nature Conservation, Regional Services and Science divisions headed to the Pilbara on a fact-finding tour.

A collective sigh of relief was given when eight Fire Management Services staff returned home safely after working 14-day shifts fighting wildfires in the United States, bringing new knowledge and skills and a renewed sense of pride in what we do.

And to top off an action-packed August, DEC's first Aboriginal tourism trainee started work at Yanchep National Park and nearly 50 people from Albany to Amery gathered in Dowerin to search for some of the Avon region's threatened trapdoor spiders as part of SpiderBlitz 2008.

September

September was a month of challenges and transitions at DEC, with the outcome of the State election being drawn out for two weeks before a new government was sworn in under the leadership of Colin Barnett.

A change of government meant a change of Minister, and Donna Faragher MLC was appointed Minister for Environment, replacing outgoing Minister David Templeman MLA.

Esperance lead and nickel contamination was high on the agenda again, with DEC releasing the first stage of a health and ecological risk assessment of the area. The full assessment, undertaken by environmental consultants Golder Associates, is aimed at identifying the risks to people and the environment as a result of the contamination. DEC also released a draft environmental assessment report, licence renewal and lead



DEC staff involved in the development of the Pinnacles Desert Discovery centre, which was opened in November, were (front, from left to right) Gil Field, Kelly Gillen, Tracy Churchill, Rick France, George Watson, Sue Hancock, Peter Fishwick and (back) Keith Hockey and Jeremy Flynn.

removal plan for public comment, and a community information session was held to update the public on future management of lead and nickel issues.

Jurien Bay was a hive of activity later in the month, after a 15-tonne juvenile humpback was stranded in shallow waters just south of the town. Sadly, wildlife officers were unable to save the young whale, and it was eventually euthanased.

On a more positive note, a search for a rare spider orchid in the Moresby Ranges north of Geraldton discovered a population of the plant in a new location. The endangered Hoffman's spider orchid (*Caladenia hoffmannii*) is known to exist in only 10 populations in the Moresby Ranges and is found nowhere else in the world.

October

The successes continued in October with the discovery of a new population of the rare sun-moth in Perth.

Other DEC staff were kept on their toes with the birth of a new dolphin at Monkey Mia, a whale stranding at Jurien Bay, a State feral camel workshop and DEC's display at the Perth Royal Show.

The month also saw the presentation of the 2008 Environment Awards recognising the tremendous work being done by corporate and small businesses, State and local government agencies and community groups and individuals to help care for the Western Australian environment. Twelve awards were presented with the overall award presented to the Australian Wildlife Conservancy and Rangelands NRM Group for their innovative Ecofire project. It was a record-breaking year for the awards with 108 entries received.

The fight against cane toads was boosted with Environment Minister Donna Faragher providing funding of \$1.2 million over four years to the Kimberley Toad Busters.

The Minister also opened Earth from Above – a breathtaking photographic exhibition on sustainability brought to Perth by DEC's Sustainability Division. The exhibition consists of 120 large-scale photographs and is the work of internationally acclaimed French photographer Yann Arthus-Bertrand.

DEC trainee Naomi Dunne was recognised as a finalist in the Aboriginal and Torres Strait Islander Student of the Year for 2008, underlining the success of the department's MATES program.

November

The Esperance lead and nickel issue was back in the spotlight in November, with the local community invited to have their say on the first stage of the Golder Associates report, at a free public workshop.

Environmental monitoring by DEC resulted in a Karratha facility being issued a

prevention notice after it discharged visible abrasive waste material into the environment. In the south, an oil spill in Albany's Princess Royal Harbour was investigated by officers from the Pollution Response and Environmental Enforcement units who travelled to Albany to assist the local office.

The cane toad issue resurfaced after another 'hitch-hiker' toad was discovered near a pond at a Karratha nursery. The toad was euthanased by DEC officers and the community was reminded about the need to remain vigilant and report any suspected sightings.

In a big win for the Goldfields, Kambalda beat 46 other WA towns to claim the State title in this year's Tidy Towns Sustainable Communities Awards which were organised by Keep Australia Beautiful WA.

And in another beautiful part of the State, the visitor interpretation centre at the Pinnacles in Nambung National Park was officially opened. More than two years in the making, the centre's tall, free-standing limestone walls evoke the limestone pillars of the Pinnacles.

Also in November, a major milestone was reached by Bush Rangers WA when the program celebrated its 10th anniversary. Past and present members of the award-winning cadet program received a commemorative pin.

The Bush Rangers program was also celebrated at the 2008 Premier's Awards when it was named finalist in the 'Creating a healthy, safe and vibrant WA' category. The development of the Bungle Bungle

Wilderness Lodge and Karijini Eco-Retreat was also named finalist in the 'Sustainable Management of the Environment' category.

The *Miriuwung-Gajerrong Cultural Planning Framework* – the first of its kind in Australia – was released in Kununurra. The framework documents the cultural responsibilities, views and aspirations of the traditional owners for the future management of conservation areas. It covers 156,000 hectares in the State's far north that will be owned by the Miriuwung-Gajerrong people under freehold title and leased back to DEC.

Another stunning DEC publication was released just in time for Christmas. *Shark Bay: twin bays on the edge*, showcases the area's distinctive landscapes and documents the bay's rare beauty, natural heritage and history, including the loss and re-discovery of HMAS Sydney.

December

For the first time since DEC's formation, a group of 120 senior staff gathered at a forum in early December to discuss future directions for the department.

On the same day, 75 delegates focused on Carnaby's black-cockatoo with a symposium attracting experts from across the country to discuss protection and recovery of the threatened species.

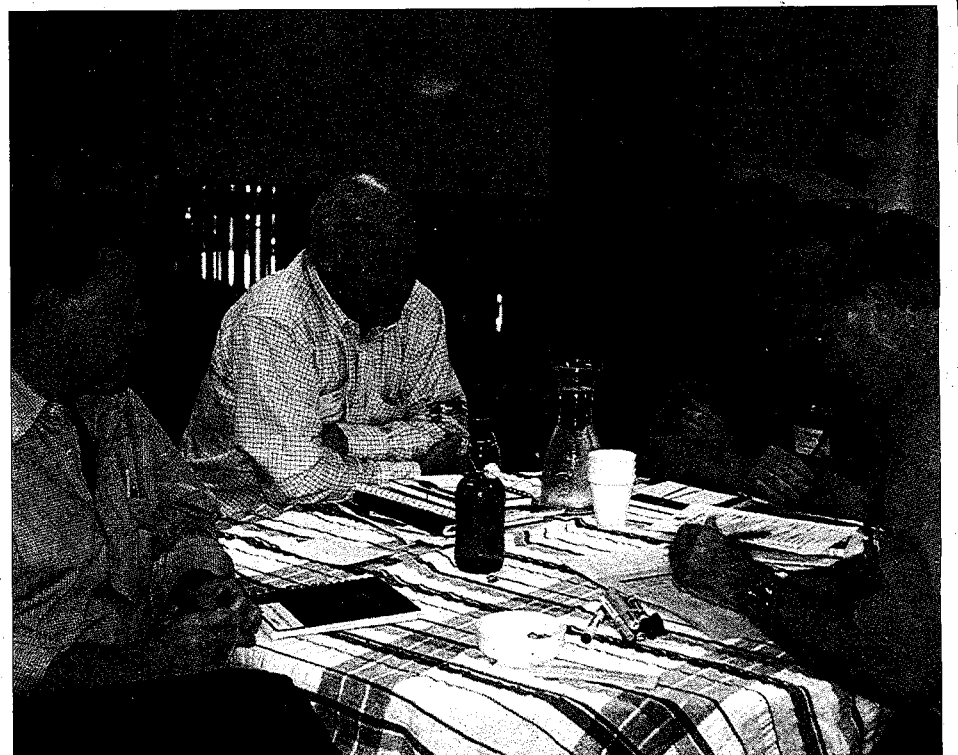
The Earth From Above exhibition continued to draw crowds to the Perth cultural centre with eye-catching pictures, while on Rottnest Island a rare success story was coming to a close. Two threatened native lizards were returned to their natural habitat, after they had been captured by a Japanese national in an attempt to smuggle them back to the mainland.

Odours from the South Metropolitan Regional Council's waste facility persisted as a community and environmental issue. Progress was made on another major issue – lead contamination in Esperance – with DEC approving the port's plan for lead removal.

The department continued to live up to its reputation at the forefront of technology when it became the first customer in the world to take delivery of the WindTracer, also known as a 'Lidar', which will revolutionise the way industrial emissions are detected in WA.

Also in December, a new strategy to protect WA's tuart forests was launched, DEC purchased 650 hectares of land to expand Nambung National Park and the year washed up with a whale carcass on a Perth beach, the 17th recorded on WA's coast in 2008.

Christmas trees were erected and celebrations abounded as many staff took a well-deserved break with time to relax and pat themselves on the back for their great work and achievements in 2008.



(Left to right) Kimberley Regional Manager Daryl Moncrieff, Natural Resources Branch Manager Ken Wallace, Wheatbelt Regional Operations Manager Wayne Elliot and Regional Services Advisor John Skillen met at the Over the Horizon forum held in early December.