



**ACT NOW**  
OR THE FUTURE



Department of  
**Environment and Conservation**

Our environment. our future

## ENVIRONMENT AND CONSERVATION

Print post approved PP665002/00001

AUGUST 2007

# WA's environment receives its report card

**AFTER nearly four years of hard work and extensive research and consultation, the Environmental Protection Authority (EPA) has released the State of the Environment (SoE) report for Western Australia.**

The document, which is an environmental report card, summarises the condition of WA's environment, assesses the major environmental issues and problems and makes recommendations to address them.

It shows that the biggest environmental challenges for WA are preventing the loss of biodiversity, halting the degradation of inland waters (such as wetlands and waterways), and addressing global pressures such as climate change and the growing consumption of natural resources.

In addition, the report identifies 34 environmental issues of importance to WA. The most significant were identified as climate change, consumption of natural resources, greenhouse gas emissions, *Phytophthora* dieback, introduced animals, weeds, land salinisation and salinisation of inland waters.

Acting Director of DEC's Strategic Policy Division Ray Wallis said the report was developed by the EPA as an independent statement to the State Government.

"The process began towards the end of 2003 when the EPA was asked to deliver a report on the state of the environment to the Minister for the Environment," he said.

The first step was to form a steering committee made up of people with

varying backgrounds and expertise.

In addition to EPA members, the committee included representatives such as Dr Tom Hatton (CSIRO), Sarah Knight (ABC), Rex Edmondson (NRM Council), Dr Sue Graham Taylor (Conservation Council), Brian Hewitt (Chamber of Commerce and Industry), Dr Libby Mattiske and Roy Green, as well as others who took part on a short-term basis.

"Working groups were formed for each of the eight major themes in the report – fundamental pressures on atmosphere, land, inland waters, marine, human settlements, heritage, and towards sustainability," Ray said. "A number of departmental officers participated on these groups, providing technical advice that fed into the report's content."

The groups met each month for about a year to work through the issues and develop draft reports that were then submitted to the EPA for review. A draft SoE report was released in June 2006 for public comment.

Following the analysis of about 80 public submissions, the EPA finalised the report and released it on 2 July.

"About 300 people from more than 60 organisations contributed their time and expertise to the development of the report including people on the steering committee, working groups and those who provided help in producing the report," Ray said.

He also said the report was a culmination of many DEC officers' hard work.

continued on page 2



(Left to right) WA Farmers Federation President Trevor De Landgraff, Environment Minister David Templeman, WAFF past President Colin Nicholl, DEC Director General Keiran McNamara and Chair of the Natural Resource Management Regional Chairs Garry English. Photo – Rhianna King

## Policy launch marks important step towards good neighbour relations

**DEC's commitment to working in partnership with its neighbours has resulted in the release of its Good Neighbour Policy.**

The policy was developed through extensive consultation with key industry bodies – the WA Farmers Federation and the Pastoralists and Graziers Association – and the WA Local Government Association, other government agencies and DEC's neighbours. The policy is designed to build and maintain good relations with the more than 16,000 landowners who share boundaries with DEC-managed lands.

It provides advice about common cross-boundary management issues ranging from fire management to fences and control of weeds and pest animals.

At the launch of the policy on the Young family's farm at Dryandra, near Narrogin, DEC Director General Keiran McNamara said completing the Good Neighbour Policy document was just part of a journey that began several years ago.

"The policy has been a long time in development as there has long been a need for DEC to state formally its aim to build and maintain good relations with all of its neighbours, and to set out the way in which the department deals with common cross-boundary issues," he said.

"Now, the challenge for the department will be to

'walk the talk'. This will require the input of all DEC staff."

WA Farmers Federation President Trevor De Landgraff said the Good Neighbour Policy was a landmark document that fostered a mutual respect for the roles of land managers on both sides of the fence.

He said he commended the policy to landowners.

Keiran also released the results of an extensive neighbour survey that saw almost 1000 neighbours comment on the department as a neighbour. Forty-one per cent of respondents said they were satisfied overall with DEC as a neighbour.

"These results highlight areas for improvement and will provide us with a benchmark with which to make comparisons in the future," he said.

Keiran commended all of the DEC staff who had contributed to the policy development and the extensive neighbour and stakeholder engagement that was a vital part of the process.

The policy, the neighbour survey results and a summary of public submissions are available from DEC's NatureBase website at [www.naturebase.net](http://www.naturebase.net).

By Rhianna King

## New tools for cane toad control

'NEW tools for cane toad control? Recent discoveries in pheromones and parasites' was the title of a recent seminar at which some of Australia's foremost researchers presented innovative research findings on cane toad biology.

The seminar was the second in the Invasive Animals Cooperative Research Centre's (IA CRC) 'Breakthrough Seminar Series' and was opened by Parliamentary Secretary to the Minister for the Environment Dr Sally Talbot.

Summarising his group's research on the biology of the cane toad at Fogg Dam in the Northern Territory, Professor Rick Shine from the University of Sydney spoke about his and researcher Crystal Kelehear's discovery of the parasitic lungworm *Rhabdias*.

*Rhabdias* has been identified as a possible control agent as it debilitates toads and slows their ability to spread.

This ecologically based approach to control still requires detailed studies to check that native frogs, like their eastern states counterparts from where the lungworm originates, are not significantly impacted by the parasite.

Other research presented at the seminar included a cane toad killing spray developed by Dr David Dall and the work of Professor Rob Capon from the University of Queensland.

Professor Capon's research into the chemical ecology of cane toads, which builds on observational work by Professor Shine, has identified an alarm pheromone made by cane toad tadpoles when they are in distress which causes other tadpoles to flee. It is hoped the pheromone can be isolated and used to disrupt cane toad reproduction.

Professor Shine is also collaborating with DEC Principal Research Scientist Dr David Pearson to study interactions between cane toads and Kimberley fauna. "This will enable us to identify species at risk and thus establish conservation priorities," David said.

Since December 2004, the State Government has allocated more than \$10 million to address the threat of cane toads. IA CRC Chief Executive Officer Professor Tony Peacock is reviewing the effectiveness of on-ground toad control to assist the State Government in making future investment decisions.

## Improving access to recreation sites

**THANKS to a partnership between DEC's Swan Region and the Disability Services Commission, Swan Region recreation sites will be more easily accessible to the 20 per cent of Western Australians who have a disability.**

Through the commission's You're Welcome – WA Access Initiative, people with disabilities will be provided with access information about facilities including recreation sites, hotels, restaurants, toilets and car parks.

As part of the initiative, DEC's Director Corporate Services John Byrne has contracted Clint Van Roon and his assistant Gail Haworth to undertake a pilot audit

of many of the Swan Region's recreation sites for disability access.

Clint is a paraplegic as a result of a car accident in 1999 and says he feels the role was custom made for him.

"The majority of the recreation areas we have audited so far have had surprisingly good access," Clint said.

"While some areas could be improved, overall there is easy access to picnic and barbecue areas as well as other facilities."

During the audit process, Clint assesses whether park facilities can be accessed by someone using a wheelchair and also checks that ramps are not too steep using a gradient measure.

So far Yanchep, John Forrest and



John Byrne and Clint Van Roon. Photo – Brenda Smith

Serpentine national parks, Matilda Bay Reserve, Perth Hills National Parks Centre, Icy Creek at Lane Poole Reserve and Creery Wetlands have been audited.

For more information about the You're Welcome – WA Access Initiative visit [www.dsc.wa.gov.au](http://www.dsc.wa.gov.au).

# Working Together

One of the most exciting aspects of the work that we do in DEC is the enormous diversity of WA's environment. This diversity, coupled with the enormous size of our State, presents both challenges and opportunities in conservation and environmental protection.

With staff from Kununurra to Esperance, and numerous points in between, one of the practical challenges for myself and Directors is to ensure we allocate enough time to visit staff and look at local issues in the field. The first twelve months of DEC has made it harder for me to get around the State, so a recent four-day trip through the wheatbelt to the Esperance area was a welcome change, and something I plan to build into my schedule more often in the year ahead.

The visit provided a great snapshot of some of the variety faced by a very busy group of staff – serious fire damage at Cape Le Grand and Cape Arid national parks; flood damage around Esperance; protecting the Esperance Lakes against increasing inundation; an inspection of Esperance port and discussions with both the port and the Shire about lead issues; protection of Lake Gore – one of our most recently listed Ramsar wetlands; a tour through the huge Ravensthorpe nickel mine; a visit to Hopetoun to see the changes resulting largely from mining growth; and a quick run through the Ravensthorpe Ranges.

Visiting all these sites with local staff reinforced the wonderful work that DEC does and the enormous dedication and expertise that staff bring to that work. I look forward to visiting many other areas of the State in the months ahead.

**Keiran McNamara, Director General**



## From page 1

"Many DEC staff worked extremely hard on getting the report produced. Brad Jakowyna, Karen Crews and Jelena May coordinated 16 working groups, pulled together the information and drafted sections of the report.

"Rod Nowrojee and Bernadette Streppel developed a number of new map products, Amanda Ellis coordinated editing of the draft report and Grant Fuller took the lead in the design and desktopping of the final report.

"I am very proud of the report and the team."

The *State of the Environment Report: Western Australia 2007* is available in several different forms. It can be accessed online at [www.soe.wa.gov.au](http://www.soe.wa.gov.au), and printed copies and CDs can be requested by contacting the DEC Information Centre at The Atrium.

# Conservation Commission visits the Goldfields Region

**SIX Conservation Commission members and one staff member recently visited DEC's Goldfields Region as part of the commission's function to provide an independent view of the standard of park management undertaken by the department.**

Reserves and areas proposed for reservation in the Mount Manning area were one focus of the visit, as these areas have important biodiversity values and are sites of ongoing exploration and mining activities.

During the two-day trip, participants also visited recreation and visitor facilities and some of the recently acquired former pastoral leases in the region.

Conservation Commission Chairman John Bailey said that such trips were important as they provided an opportunity to improve understanding of issues and to consult with local stakeholders.

"A key objective of the visit was to improve understanding of the banded ironstone formations in the region," he said.

"These geological formations have been demonstrated to be of major international biological significance.

## Environment and Conservation News August 2007

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

**Managing Editor:** Kaye Verboon

**Editor:** Rhianna King

**Contributing Editors:** Joanna Moore, Samille Mitchell

**Design and Production:** Natalie Jolakoski

**Telephone:** (08) 9389 8644

**Facsimile:** (08) 9389 8296

Printed on 100% recycled paper

By Peter Baldwin

"It is therefore important that they are afforded further protection through appropriate additional reservation."

The visit also provided the chance to get to know regional staff and a detailed briefing on important regional initiatives such as Aboriginal joint management programs and prescribed burning.



DEC Goldfields Regional Manager Ian Kealley (kneeling) briefs commission members and DEC staff. Photo – Peter Baldwin

## Preliminary results of Wagerup air study released

**LASER technology not previously used in Australia is giving DEC a better understanding of the movement of emissions from the Wagerup Alumina Refinery and how these might impact on nearby communities.**

DEC's Air Quality Branch, supported by public affairs staff, recently held two community information sessions in Yarloop to discuss the preliminary results of the department's winter 2006 light detection and ranging (Doppler LIDAR) study.

Air Quality Branch Manager John Sutton said DEC scientists used the LIDAR equipment to show that seasonal weather conditions combined with the area's landscape could cause emissions from the refinery to be trapped near the ground.

"The plumes have been observed extending over five kilometres from the plant and lasting for up to 18 hours," he said.

"The plume is trapped mainly between early evening and late morning during cold weather when the temperature rises with increasing height from the ground."

The information sessions included displays, brochures, a visual presentation of the LIDAR results and information about the winter 2006 community air sampling program. Staff from DEC and the Department of Health were available for residents to talk to.

Feedback from residents was positive and many said the results indicated what they had suspected for a long time.

Australian and overseas researchers are collaborating on the Wagerup air quality project. The new technology was contracted by the Arizona State University whose staff are analysing and interpreting the LIDAR data collected last year.

DEC is continuing its work to determine the chemical and physical composition of the plumes and to establish how close to the ground they are trapped and how long they persist.

The use of LIDAR technology was part of a \$1.2 million program last winter designed to improve understanding of local conditions in Wagerup.

The preliminary report of the 2006 Wagerup LIDAR study is available on DEC's website at <http://airquality.environment.wa.gov.au/wagerup>.

## Online resource helps Animal Ethics Committee

**A NEW online resource is providing DEC staff with information to ensure they comply with ethical and statutory responsibilities when they handle animals.**

Last year DEC staff handled nearly 47,000 animals that were trapped and measured in fauna surveys, handled during translocation and monitoring projects, trapped for ecological research into feral animal control or part of captive breeding programs or educational displays.

All fauna interactions in the department involving living vertebrates, excluding fish, must be approved by the department's Animal Ethics Committee (AEC) through a written application.

AEC Acting Executive Officer Teagan Smith said the committee's roles were to ensure research and monitoring undertaken by staff on fauna was conducted in an ethical manner and to support staff in meeting their statutory requirements.

"A new Animal Ethics Committee webpage on DEC's CALMweb intranet site informs staff about these requirements and helps in submitting applications to the committee," she said.

All DEC projects involving animals must comply with the *Animal Welfare Act 2002* and its associated regulations, which are administered by the Department of Local Government and Regional Development (DLGRD).

The Act requires scientific institutions to be licensed and to operate according to the 'Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (7th Edition)'. Therefore DEC's use and supply of animals for scientific purposes falls under a Corporate Licence, issued by DLGRD.

"The webpage provides explanations of, and links to, the Animal Welfare Act and regulations, the Code of Practice and the department's animal ethics standard operating procedures," Teagan said.

"You can also download all the necessary forms for new applications, amendments, annual reports and competency checklists, as well as read answers to frequently asked questions and examples of previously approved applications."

The AEC's next meeting is on 26 October. Application submissions must be received by



Teagan Smith with a Stimpson's python. Photo – Joanna Moore

## Symposium for fertiliser phase-out

**A PLAN to phase out the use of damaging fertilisers along the Swan Coastal Catchment was the focus of a recent stakeholder symposium attended by Government agencies, a wide range of land users, catchment councils and fertiliser industry representatives.**

Acting Director of DEC's Strategic Policy Division Ray Wallis said the State Government had made a commitment to phase out river-harming fertilisers in environmentally sensitive areas in the south-west of WA.

"High levels of nutrients are transported to our waterways each year and are causing algal blooms, odours, low oxygen levels and fish deaths," he said.

"Highly water-soluble phosphorus fertilisers are a major contributor to this declining water quality."

Following the Government's commitment, a joint Government and fertiliser industry working party developed a plan to phase out highly water-soluble phosphorus fertilisers in these areas over the next four years.

The working party presented Environment Minister David Templeman with the Fertiliser Action Plan in March this year, recommending measures to be taken to achieve this by 2011.

DEC Environmental Analysis and Review Senior Environmental Officer Annelies de Ruyter said the symposium on 3 July

attracted more than 90 participants and provided a forum for discussions about the recommendations of the plan.

"The symposium enabled stakeholders to hear differing views and concerns from people this plan will affect," she said.

"It was important to understand what the needs of users are before deciding how best the fertiliser phase-out can occur.

"Feedback gathered at the symposium, along with comments submitted through a public comment facility on DEC's website, will now be considered before the Minister will decide on the final mix of actions."

The plan was open for public comment until 31 July.

# Saving our Species achieves remarkable results

NOW into its second year, DEC's *Saving our Species* program has delivered remarkable outcomes across the State since it started in July 2006.

The great results have been achieved through a collaborative approach to biodiversity conservation and lots of hard work.

*Saving our Species* Manager Nigel Sercombe praised DEC staff who have worked on the program over the year.

"The success of individual projects and the initiative as a whole is testament to the dedication and operational ability of these staff," Nigel said.

"In many instances they took on the challenge of *Saving our Species* projects on top of their normal works programs."

*Saving our Species* started with the objectives of achieving long-term biodiversity conservation results from

a short-term, strategic focus; protecting biodiversity assets under immediate threat; addressing new threats while they are manageable; and progressing key biodiversity conservation and good neighbour priorities.

Measured against these objectives, the first year of *Saving our Species* has been a resounding success.

From the identification of 30 new plant species through a biological survey of the Ravensthorpe Ranges to the removal of more than 100 tonnes of rubbish at Bush Forever sites around Perth, *Saving our Species* projects have delivered lasting biodiversity conservation outcomes that will benefit Western Australia for the next decade and beyond.

Other project highlights include the reduction of a dolichos pea infestation at Leeuwin-Naturaliste National Park by 90

per cent, the removal of more than 8000 pest animals from national parks, nature reserves, forests and conservation parks throughout the State and the completion of a 12-kilometre fence to help stop the spread of *Phytophthora* dieback through Fitzgerald River National Park.

As well as providing long-term biodiversity conservation results, *Saving our Species* has also provided staff with the opportunity to strengthen relationships with key stakeholders.

"Community involvement and response to the initiative so far has been very encouraging and has contributed significantly to the success of the program," Nigel said.

"We now look forward to building on this success and hope to deliver more remarkable outcomes in the second year of *Saving our Species*."

## Bell Track dieback fence complete

By Joanna Moore

**THE construction of a fence around an infestation of *Phytophthora* dieback at Bell Track in the Fitzgerald River National Park has recently been completed.**

Bell Track Project Officer Maria Lee said the 12-kilometre fence which now surrounded the 183-hectare Bell Track infestation was one strategy in the *Saving our Species* project to contain the infestation within the current micro-catchment.

"If the infestation isn't confined it will reach two nearby tributaries and will inevitably infect as much as 75,000 hectares in the initial dispersal," she said.

"Future spread could see much of the 330,000-hectare reserve eventually being exposed to the pathogen."

This situation is of immense concern as the reserve is now recognised as one of the least infested landscapes within the high rainfall zone of the south-west of WA.

Fitzgerald River National Park on the State's south coast is one of the most diverse botanical regions in the world, reflected in its designation as a World Biosphere Reserve.

The construction of the 1.8-metre high fence is a major step in the management of the dieback infestation which was introduced in the 1970s by earth-moving equipment constructing an illegal road through the park. The fence will control animal movement which is one agent of dieback spread.

Between February and April more than 1000 soil samples were collected to ensure the fence construction would not spread the disease to uninfested areas. Strict hygiene standards were maintained throughout the process.

Other strategies to contain the infestation include a hydrological investigation and engineering feasibility study, on-going application of high intensity phosphite to sites with a high risk of escape and 18-monthly applications of phosphite across the entire infestation.

## Massive pigs trapped in Swan Region

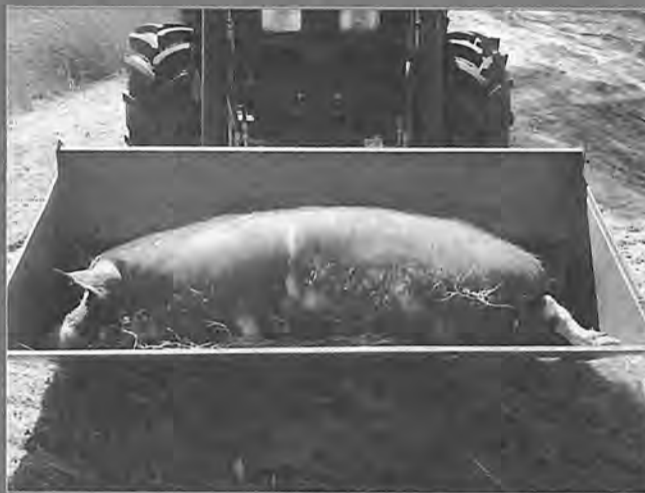
TWO female pigs weighing more than 180kg each were recently trapped at Mogumber Nature Reserve, north of Gingin.

DEC Senior Nature Conservation Officer Rod Martyn said the average weight for feral pigs was usually between 75 and 120kg.

"These two pigs were trapped near a site where captive-bred western swamp tortoises were released as part of a species recovery program," he said.

"Although we do not think feral pigs predate on the critically endangered western swamp tortoise, they are known to damage their habitat and other biodiversity values by wallowing and rooting around the edges of watercourses and swamps.

"The impact of pigs has been



One of the pigs trapped in the Mogumber reserve.  
Photo - Barry Curnuck

seen at the site where western swamp tortoises have been released."

An additional \$135,000 was committed through the *Saving our Species* project to combat

feral pig populations along the Swan Coastal Plain and Darling Scarp.

Control efforts have concentrated on Mogumber and Yeal Swamp nature reserves, Avon

Valley National Park and Julimar Conservation Park.

"We are using several control techniques including baiting, trapping, opportunistic shooting and 'Judas' pigs - where a radio collar is attached to a feral pig and its movements tracked," Rod said.

DEC is committed to working with local shires, community groups and private landowners, in line with its Good Neighbour Policy, to combat the feral pig problem.

Feral pigs not only cause habitat destruction but spread environmental weeds and plant pathogens, including *Phytophthora* dieback.

Residents in the Swan Region who are experiencing problems with feral pigs should contact DEC's Swan Coastal District office on 9405 0700.

## Battle against weeds at Breaksea Island

GREENSKILLS Incorporated has joined forces with local DEC staff to control an infestation of the weed *Cotyledon orbiculare*, also known as 'pig's ear' on Breaksea Island, near Albany.

Stage two of the weed control work began recently and involves the weed being removed by hand.

DEC Nature Conservation Coordinator Kim Kershaw said the *Saving our Species* project was a great example of DEC and a community-based organisation working together to benefit nature conservation.

*Cotyledon* has infested about eight hectares of the 103-hectare island.

"Breaksea Island is a dominant feature on the Albany seascape and has significant cultural, heritage and conservation values," Kim said.

"It provides important habitat for burrow-nesting seabirds such as the flesh footed shearwater, great winged petrel and little penguins.

"However, surveys on the island have indicated that *Cotyledon* is preventing the regeneration of native vegetation by competing for soil and nutrients."

The spread of the weed is causing the degradation of natural habitat for the seabirds, as its root structures limit the ability of the birds to dig and make burrows.

"Removing the weed from the island will help increase the cover of native plants and in turn provide more natural habitat for the native wildlife on the island," Kim said.

Pig's ear originates from the mountainous regions of Swaziland, in southern Africa.

It was introduced on Breaksea Island as a garden plant by the families of former lighthouse keepers and subsequently escaped to become widespread among the heath and scrub of the island.

## Controlling date palm infestations

THE results of a three-day aerial survey of wetland and river systems in the Pilbara have been used to develop an on-ground *Saving our Species* works program for the control and eradication of date palm infestations.

DEC Regional Nature Conservation Leader Peter Kendrick said it was the first time such a large-scale aerial survey on date palms had been done in the area.

"The survey highlighted the extensive spread of date palm infestation in the region," he said.

"Anything from one date palm to mass infestations of more than 100 trees were recorded and mapped."

Regional Nature Conservation Officer Cath Rummery said local DEC staff had received assistance from staff around the State for control work in the Millstream and Gregory Gorge areas, as part of a program with the Department of Water.

"It's been great for local staff to have the help of Blackwood District staff and Aboriginal trainees to undertake control work on both date palms and parkinsonia in this important area," she said.

Date palms were introduced in the early days of pastoralism and have become a major threat to the conservation values of Pilbara wetlands.

"They form impenetrable colonies



Aboriginal trainees from around the State who worked on the date palm control were (left to right) Adrian Condon from Karratha, Michael O'Dene from Kalbarri, Ken Sandy from Millstream-Chichester National Park and William Newchurch and Nigel Johnson from Esperance. Photo - Karim Khan

that suck up large amounts of water from the springs, starving native plants and animals of scarce water resources," Cath said.

"They also destroy native wetland vegetation such as paperbarks and river gums by fuelling intense

wildfires, eventually resulting in stands of nothing but palms."

Larger trees are removed by felling or by using machinery. Control work on juvenile trees involves spraying the core of the tree with a herbicide.

# DEC protects remote water source

By Samille Mitchell

DEC has helped a remote Aboriginal community protect an important water source from camels.

Feral camels in the Gibson Desert roam free and, in times of low rainfall, visit a soak which is of significance to the Patjarr people, who live about 200 kilometres north of Warburton.

However, while accessing the water, the camels often fall into the soak and die, their decomposing bodies fouling the water source.

The Patjarr community asked the Ngaanyatjarra Council's land management unit and DEC to help protect the soak from thirsty camels. A joint management project to tackle the problem was approved.

Parks and Visitor Services Acting Regional Leader Steve Toole said the first planning trip involved about 30 traditional owners including children and grandchildren. These people passed on cultural knowledge relating to the soak and also helped clear the area around the soak. The second trip involved 28 people.

"Men, women and children all eagerly got involved with the fencing, holes were dug, posts cut and raised and the cable prepared," Steve said.

"By lunch time the women had prepared food for the hard workers and everyone had a well deserved rest.

"The task was completed in two days and the quick finish pleased all involved. The community was happy to know that the camels will have a much harder time reaching the soak and hopefully they will not be able to get in at all."

Other DEC staff involved included Regional Ecologist Karl Brennan, Conservation Employee John Moore and Reserves Officer Jade Fogarty.

Project officers from the Working Together joint management initiative, Tatjijarra Robertson and Norma Giles, arranged the Patjarr community involvement.

Together, these people ensured all operational and cultural matters were addressed.



Many hands make light work – members of the Patjarr community with project officers from the Working Together joint management initiative. Photo – DEC

## Yvonne a treasured volunteer

THE dedication and contribution of long-time DEC volunteer Yvonne Varris was recently celebrated at a farewell event at Kensington.

Yvonne has played a central role in the department's black cockatoo rehabilitation program and also as an after-hours volunteer on DEC's Wildcare Helpline.

Senior Wildlife Investigator Rick Dawson said all Nature Protection Branch staff, and particularly the wildlife officers, would greatly miss Yvonne, who has volunteered since 1998.

"It is going to be impossible to fill the gap she will leave," he said.

"Yvonne has driven 100,000 kilometres in total to pick up injured black cockatoos, from Three Springs to Cunderdin, and has spent countless hours rehabilitating them.

"Her success rate is impressive – of the 306 black cockatoos she has cared for, 107 have been released into the wild and 41 live in captivity for breeding programs or to help the rehabilitation of other black cockatoos.

"Yvonne's professionalism also led to a great working relationship with the Perth Zoo."

Nature Protection Branch Manager Dave Mell said Yvonne's knowledge, skills, determination and



(Back row, left to right) Wildlife Officer Geoff Cullen, Principal Compliance Officer Paul Connolly, Senior Wildlife Investigator Rick Dawson, Wildlife Officers Allan Madgwick and Matt Swan, Nature Protection Branch Manager Dave Mell, (front row, left to right) Supervising Wildlife Officer Peter Lambert, Yvonne Varris, Fred Varris, Senior Wildlife Officer Doug Coughran and Regional Wildlife Officer Daniel Hunter. Photo – Joanna Moore

By Joanna Moore

innovation had been invaluable.

"Yvonne's development of flight harnesses to test whether rehabilitated cockatoos were able to fly well enough to be released is just one example of that innovation," he said.

Community Involvement Coordinator Marg Buckland said during her time

with the Wildcare Helpline, Yvonne was often responsible for the significant task of responding to calls from the public over a whole weekend.

"Yvonne's practical approach, enthusiasm, advice and support has been treasured," Marg said.

"She has been an absolute inspiration." The effects of multiple sclerosis have forced a reluctant Yvonne to take a step back from her extensive volunteer commitments.

## Sharing bee research

FERAL bee research at DEC was recently sought out by a senior apiary inspector from the South Australian Department of Primary Industries and Resources.

Michael Stedman met with DEC's Feral Bee Project Officer Jacqueline Hay who is researching feral bee control techniques as part of a joint DEC-Water Corporation study.

The research aims to establish a safe and efficient method of controlling feral bees, particularly in areas where they are having a negative impact on native plants and animals, such as threatened black cockatoos.

The reason for Michael's visit is *Varroa destructor* – a highly destructive parasitic mite that has significantly impacted beekeeping industries around the world and also wipes out wild bee populations.

Michael said Australia was the only country in the world free from *Varroa destructor*.

"It's not really a case of if *Varroa* will get into Australia, but when," he said.

"The Australian horticultural industry is worth \$3.8 billion and \$1.7 billion of this relies on honey bees for pollination.

"This means there is an urgent need for the beekeeping community to have a response prepared for the incursion of this parasite."

The imminent danger posed by the *Varroa* mite is the focus of a current Federal inquiry into the future development of the Australian honey bee industry.

Working out the best practice for controlling feral bees is one part in the preparations to meet the threat of *Varroa destructor* before it arrives in Australia.

Michael and Jacqueline visited research bee baiting stations at Yellagonga Regional Park and discussed remote poisoning methods.

While the foci of Michael and Jacqueline's projects are different – protection of the horticultural industry and biodiversity conservation respectively – Michael was keen to learn about new baiting techniques to help emergency response planning for the arrival of the dreaded *Varroa* mite.



Celebrations of Aboriginal culture were held at DEC's Aboriginal Heritage Unit (AHU) and at Yanchep National Park as part of nationwide NAIDOC week activities in July. Pictured at the celebration were the AHU team, left to right, Heritage Officers Tom Dimer and Delvene Cornwall, Cultural and Community Coordinator Koodah Cornwall, Project Officer Denise Griffith and Heritage Officer Eddie Wilkes. The specially decorated courtyard Wankinying Mia Mia (talking place) at the AHU at Kensington provided a colourful setting where DEC staff watched some traditional activities including tool making, didgeridoo playing and bush string making from sedge grass. Staff were also told about a booklet that explained the stories behind the Aboriginal artwork in Wankinying mia mia. About 400 visitors also joined NAIDOC celebrations at Yanchep National Park. Activities included face painting, boomerang painting, didgeridoo playing and a bush meat barbecue.

## New drive trail boosts Wheatbelt tourism

ANOTHER boost for tourism in the Wheatbelt region was recently announced by Environment Minister David Templeman when he opened a new interpretive drive trail at Dryandra Woodland.

The 23-kilometre drive trail provides visitors with fantastic views of the woodland as well as a range of high quality pictorial and written information that describe the wonders of the natural ecosystems in the area.

Wheatbelt Regional Manager Bruce Bone said interpretive material erected along the trail for visitors and at information

shelters gave visitors an insight into the ecology of the area's unique biodiversity.

"For example, one shelter details the relationship of the woylie and the sandalwood plant and their interdependency to survive," he said.

"While there are many walk trails in the area, the drive trail provides people who are unable to walk the trails with the opportunity to experience the woodland.

"The trail is the first of its kind in the region and complements the many other interpretive facilities on offer

at Dryandra Woodland, one of the largest remnant areas remaining in the western Wheatbelt."

Visitors come to Dryandra to see numbats, woylies, tamar wallabies, brushtail possums, tawny frogmouths, kangaroos, wallabies and many species of bird, including the mound-building malleefowl.

Nature-based experiences on offer include night-time tours to see several threatened species, including the bilby, that are being captive bred at the Barna Mia animal sanctuary as part of the department's *Western Shield* program.