

November/December 2008

Preparing for the Western Australian fire season

WITH the hot summer days ahead the wildfire season will once again test the resources and skills of Department of Environment and Conservation (DEC) staff.

Fire Management Services Manager Murray Carter said preparing for the summer fire season was always a big effort and one that involved many aspects.

"We are continually improving our preparedness, including our equipment, fire teams and operational procedures," he said.

"One example this season is the new mobile incident control centre which was trialled in Nannup during October.

"The trial went well and the functional issues which emerged are being fixed."

Fire Resources Operations Coordinator Greg Napier said the communications centre enabled all the operations involved in responding to a major fire to occur from one point, close to the fire.

"The centre includes satellite-based telecommunications technology that enables DEC's incident management teams to operate anywhere in the State," he said.

The centre has workstations with computers, a two-way radio operations room, 16 voice-over-internet telephone lines, dedicated facsimile lines and photocopiers. It is supported by a specialist logistics trailer for additional equipment and two generators which provide power to the mobile control centre.

More traditional firefighting tools such as fire towers, spotter aircraft and water bombing planes will also be used during the fire season.

"A key component of being prepared for the wildfire season is our prescribed burning program which largely occurs throughout spring and autumn," Murray said.

"The department's prescribed burning program has been designed to meet a number of objectives, including the protection and maintenance of biodiversity values and the protection of community values from the impact of severe wildfires.

"Unfortunately, unseasonable wet weather in late October has meant that the spring 2008 burning target is not being met."

This fire season will be the fourth for DEC's pre-formed fire teams.

Staff from all parts of DEC are in the five teams which are mobilised to fire incidents across the State during the fire season.

Fire Management Services Branch Senior Planning Officer Roger Armstrong said teams helped regions manage fires that ran for an extended period or were too big or complex for the local resources.

"A recruiting drive before this year's fire season has been very successful in gaining new staff for the teams, including staff involved in industry regulation and other areas of the former Department of Environment," he said.

"Many of the roles performed at fires do not require actual on-ground firefighting experience. Familiarity with office procedures and equipment, Microsoft software products, the ability to organise, drive a vehicle, read a map and work with team members is often all that is required, in addition to some basic training."

Roger said people with no fire experience could make a valuable contribution to a team's performance.

"If you are interested in joining a team talk to the Regional Fire Coordinator in your local regional DEC office. Perth-based staff should contact Jane Mansergh at Swan Region on 9423 2921," he said.

Each of the five pre-formed incident management teams consists of about 65 people and is structured in line with a nation-wide incident control system called the Australasian Inter-Service Incident Management System (AIMS). This enables DEC teams to help fire-fighting agencies in other states and territories and also in the USA.

About 320 people from DEC, the Forest Products Commission and other agencies are in the fire teams this season.



(Left to right) Director General Keiran McNamara, Premier Colin Barnett, Bush Rangers WA program coordinator Alison Hansen, Director of Strategic Development and Corporate Affairs Ron Kawallak, Environment Minister Donna Faragher and Assistant Director Policy and Planning Colin Ingram.

Premier's Award finalists

By Catherine Jack

TWO new world class eco-retreats and the inspirational Bush Rangers cadetship program were both named as finalists in the 2008 Premier's Awards.

Providing a touch of luxury in the heart of the wilderness, the development of the Bungle Bungle Wilderness Lodge and Karijini Eco-Retreat in two of WA's iconic national parks has been a great success.

Tourism Branch Manager Rod Quartermain said the development of the retreats was the culmination of a joint effort by many people.

"It confirms for me that the goal of balancing the use of the areas we manage for tourism and recreation with the protection of the conservation values is being achieved in a way that benefits all stakeholders," Rod said.

He said that through creating partnerships with the traditional owners of the area and the major commercial operators, DEC had created first-class environmentally sustainable accommodation.

Both developments have Aboriginal ownership and include custom-built tented cabins with ensuite facilities. They are primarily powered by solar panels, use water-efficient toilets and have environmentally friendly waste disposal systems.

The Bush Rangers WA cadet program has grown to be a major State-wide success story since it started as a pilot project in 1998

involving two schools and 25 students. The department's cadetship program has successfully engaged more than 10,000 young West Australians in a vast range of projects and activities that protect our fragile and distinctive environment.

Program coordinator Alison Hansen said Bush Rangers WA aimed to capture the imagination of young people and encourage their interest in the environment.

"Since the program's inception, Bush Ranger cadets have collectively contributed more than 1.5 million volunteer hours of work on conservation and community projects," she said.

"Young Bush Rangers across the State dedicate their time to a diverse range of projects, including planting native gardens, recycling, weeding, native animal monitoring and revegetation projects."

The awards covered achievements across five categories including improving Government, strengthening regional Western Australia, sustainable management of the environment, creating jobs and economic prosperity and creating a healthy, safe and vibrant Western Australia.

Miriuwung-Gajerrong plan launched

THE Miriuwung-Gajerrong Cultural Planning Framework has been released in Kununurra.

DEC Director General Keiran McNamara said the planning framework was the first of its kind in Australia and could become a standard for joint land management with Aboriginal traditional owners.

"This blueprint reflects an innovative approach to joint management that could well become a standard model used

by DEC and other State Government agencies," he said.

The framework stems from the Indigenous Land Use Agreement – known as the Ord Final Agreement reached in October 2005 – that acknowledges the Miriuwung-Gajerrong people's aspiration to assume sole responsibility for the management of conservation lands in the Ord River area in the long term.

Continued on page 2...



DEC Director General Keiran McNamara, Chairperson Yoorrooyang Dawang Regional Park Council Margaret Moore and Environment Minister Donna Faragher at the launch of the Miriuwung-Gajerrong Cultural Planning Framework in Kununurra.

Photo – Dr Rosemary Hill/CSIRO

DEC staff look over the horizon

MORE than 120 DEC senior managers and leaders met in December to look to the future and provide ideas for DEC's next corporate plan.

Director General Keiran McNamara said the forum, entitled 'Over the Horizon', aimed to build connections and understanding of the diverse operations in the department, consider key trends and drivers of change and discuss how those changes might impact on the environment and DEC.

"There are challenges involved in taking time out to think and plan for the future," he said. "However, days like this are a great opportunity to share perspectives and make

face-to-face connections.

"This opportunity was used well and my intention is that the information will be used in helping the department go forward, including in the corporate plan to be developed by mid 2009."

Keiran said the department needed to explore ways to be innovative in the way it carried out its business in the immediate and long-term future.

"We operate in a professional world where problems and challenges require us to be creative and persistent," he said.

The forum featured live and recorded presentations that provided a snapshot view of

the work carried out by people throughout the department.

"The presentations demonstrated the passion, commitment and skills held by people around the department and reinforced the need for staff to know the value of their work and have an appreciation for the range of work the department does," Keiran said.

Four external speakers who specialise in planning for and analysing the future spoke to the group and highlighted challenges facing the department such as the ageing workforce, attraction and retention, an ageing consumer base and planning for the unknown.

Working Together

A highlight of the last couple of months was the visit in mid-November to Nambung National Park for the opening by our Minister of the Pinnacles Desert Discovery visitor centre.

The centre represents the culmination of considerable planning and design by DEC staff. Nambung is a popular national park, and with a new coast road from Perth being constructed, the centre and other works in the park are a great example of acting ahead of an expected increase in visitor numbers rather than responding after the event. The impressive design and layout, the interpretive content and the sustainability features incorporated in the building are a tribute to our staff and others who worked with DEC on the centre.

Another recent achievement at Nambung is the agreement to purchase a 600-plus hectare enclave of freehold land to add to the national park. The former National Parks Board first inquired about acquiring the land in the 1960s – some efforts in conservation take a long time to bear fruit, but perhaps that makes them even more satisfying when a successful outcome is achieved.

In my final column for the year, I want to thank all the staff of the Department for your commitment, enthusiasm and hard work in what has again been a challenging year, but one in which I believe the Department has served the community and the Western Australian environment well. Together with our Minister, Donna Faragher and my colleagues on the Corporate Executive, I would like to extend to all our staff, our statutory authority members, and our numerous volunteers and partners, my best wishes for a happy and safe Christmas and New Year.

Our staff will inevitably be fighting wildfires over the holiday period and the remainder of summer, and the safety of our staff and the community will be our top priority while doing so.

Keiran McNamara,
Director General



...continued from page 1

Keiran said the agreement committed the State Government to developing the management capabilities of the Miriuwung-Gajerrong people.

"The framework is the first step in this process," he said.

"It aims to consolidate the cultural responsibilities, views and aspirations of the traditional owners for the future management of conservation areas.

"It also will lead to the development of joint planning guidelines that will accommodate Miriuwung-Gajerrong aspirations and DEC management responsibilities under the *Conservation and Land Management Act 1984*."

The plan 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.

Importantly, it recognises not only traditional ownership, but also the area's

natural richness and its cultural heritage.

Dr Rosemary Hill from CSIRO worked with the traditional owners and DEC to develop the document.

DEC Miriuwung-Gajerrong Project Joint Management Coordinator Scott Goodson said the department had employed six Miriuwung-Gajerrong trainees to look after country.

"This is part of the joint management initiative and is a direct result of the groundwork of the cultural planning framework," he said.

"The trainees will help make sure the deliberations of the elders are incorporated into management actions.

"This includes strategies for accessing country, recording and preserving cultural sites, managing fire and establishing tourism facilities."

The document is available on DEC's website at www.dec.wa.gov.au and the Miriuwung-Gajerrong website at <http://yawoorroongmgcorp.com.au>.

Miriuwung-Gajerrong rangers fire ready

FIVE Miriuwung-Gajerrong rangers recently completed their Basic Fire Awareness Training in Kununurra as part of formal training requirements through DEC.

Regional Fire Coordinator Ed Hatherley said it was encouraging to see local Indigenous people involved in fire suppression, particularly given their intimate knowledge of the area.

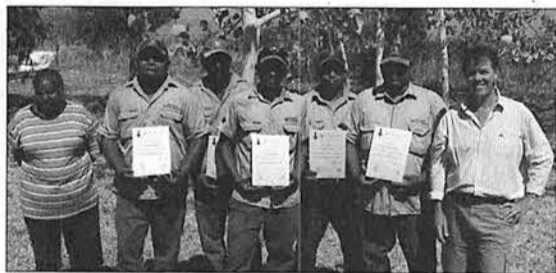
"It provides a significant increase in capacity to deal with wildfire suppression in the East Kimberley," Ed said.

Just a week after their training the rangers were moved to the front line to combat wildfires around Kununurra, working alongside shire and local fire brigades.

The trainee rangers will have more specialised training in March.

They are being trained in conservation and land management and will apply their skills as part of a joint management project between the Miriuwung-Gajerrong Corporation and DEC.

For more information contact Miriuwung-Gajerrong Project Joint Management Coordinator Scott Goodson on 9168 4200.



Yoorrooyang Dawang Regional Park Council Chairperson Margaret Moore (far left) and DEC Kimberley Regional Manager Daryl Moncrieff (far right) present ranger trainees Leslie Moore, Chris Retsas, Jeremiah Hester, Vincent Kennedy and Andy Reid with their certificates.

Environment and Conservation News November/December 2008

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, Catherine Jack

Design and Production: Peter Nicholas

Telephone: (08) 9389 8644

Facsimile: (08) 9389 8296

Printed on 100% recycled paper

See your Earth from Above

EARTH from Above – a breathtaking photographic exhibition on sustainability – is on show in Perth's Cultural Centre.

The outdoor exhibition consists of 120 large-scale photographs which capture extraordinary images of our planet. It is the work of internationally acclaimed French photographer and sustainability enthusiast Yann Arthus-Bertrand.

DEC's Sustainability Division brought the exhibition to Perth to help increase community awareness of and involvement in dealing with sustainability issues. Environment Minister Donna Faragher launched the exhibition in October.

DEC Manager Sustainability Programs Terry Lewis said the exhibition presented the diversity of sustainability issues through evocative, high-quality aerial colour photos from 58 countries, including five from Australia.

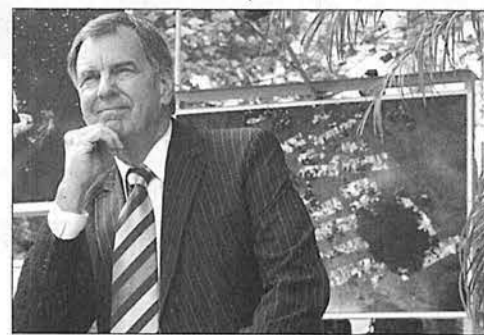
"Each photograph captures a fascinating perspective of life, human endeavour or the natural environment throughout the world, from a sustainability focus," he said.

"Combined with brief, thought-provoking sustainability messages, the images are compelling and informative, and encourage reflection and discussion."

Earth from Above is free and open to the public 24-hours-a-day.

The exhibition runs until mid-January and is accompanied by a calendar of events which includes forums, tours, festivals and activities at the Cultural Centre and other locations.

Terry said sustainability was a major issue confronting the world.



DEC Manager Sustainability Programs Unit Terry Lewis. Photo – Liz Grant

"Sustainability is about meeting the needs of the present, without compromising the ability of future generations to meet their own needs," he said.

"Accepting the obligation to establish and maintain enduring foundations on which future generations can continue to flourish is as much a moral issue as a practical one.

"It is also a matter that cannot be left to governments alone to address. Society as a whole has a strong personal stake in contributing to sustainability.

"Earth from Above is a unique event that provides the opportunity for a wide cross-section of the community to easily gain an appreciation of sustainability in its many manifestations."

For more information contact Terry on 6467 5538 or visit the information bay at the exhibition between the Art Gallery, WA Museum and State Library in Northbridge.

A tribute to Vincent Serventy

ONE of Australia's greatest environmentalists, the late Vincent Serventy, has been honoured at a commemorative event at Dryandra Woodland near Narrogin.

At the event, DEC and the Conservation Commission of WA announced a scholarship in Mr Serventy's honour and unveiled an art installation and interpretive panels.

Mr Serventy, who died last year, is known as the father of conservation in Australia.

He wrote more than 70 books, featured regularly in the media and campaigned to protect areas of high conservation value in WA and around the world.

In a career that spanned 60 years, Mr Serventy worked to realise his vision of a world where people understood that they did not own the Earth but were trustees for its future.

Dryandra Woodland was one of Mr Serventy's favourite places and the subject of his renowned book, *Dryandra – The story of an Australian forest*.

Mr Serventy considered Dryandra the 'best bit of woodland in Australia' and helped raise awareness of its biodiversity values.

Conservation Commission Chairman John Bailey announced the scholarship, which will go to a student in the field of environmental education or nature conservation.

"After seeking the advice of the Australian Association for Environmental Education, the Conservation Commission has offered

the scholarship to Murdoch University because of its long-standing reputation in environmental science and environmental education," he said.

The Vincent Serventy Memorial Scholarship will provide the selected student with \$5,000 towards their studies each year for five years.

John said Mr Serventy's life and work demonstrated how the combination of good science and a supportive community could lead to conservation gains.

"For governments to succeed in creating new national parks and nature reserves, it requires the visible passion of people like Vincent; passion that is shared and embraced by the Conservation Commission," he said.

DEC Director General Keiran McNamara thanked the Conservation Commission for developing the scholarship, which not only serves as a tribute to Vincent Serventy but also encourages a new generation of Western Australians to consider environmental conservation as a career path.

Keiran said Mr Serventy was a pioneer in the conservation of WA's natural environment, recognising the need to protect and preserve the State's unique biodiversity and special places such as Dryandra and Shark Bay.

"He had a great deal of knowledge as a teacher, naturalist and author, and he used this to raise awareness about the importance of conservation in Australia," he said.



DEC Parks and Conservation Acting Deputy Director General Caris Bailey (left), Conservation Commission Chairman Dr John Bailey, Vincent Serventy's widow Carol Serventy and Murdoch University Environmental Science Associate Lecturer Catherine Baudains celebrate the unveiling of the panels. Photo – Emma de Burgh

Bush Rangers WA celebrates 10 years

DEC's award-winning Bush Rangers WA cadet program celebrated its tenth year in November.

Bush Rangers WA is a voluntary nature conservation program for secondary school students aged 13 to 17 and is part of the broader Cadets WA program. It advocates community involvement in protecting our State's biodiversity and cadets have contributed more than 1.5 million hours to conservation and community projects since the program started in 1998.

The anniversary was held at Mt Lawley Senior High School where students have been involved with the program since its inception.

By Catherine Jack

Environment Minister Donna Faragher congratulated past and present Bush Rangers from the school and presented them with a commemorative pin.

"This school has been one of the most active participants in Bush Rangers WA and I recognise the immense value this program provides not only to its members, but the school and the wider community that benefit from their conservation work," she said.

"It is vital we all do our bit to preserve the State's environment to ensure a healthy and sustainable

future and getting positive messages out into schools and communities helps foster this involvement."

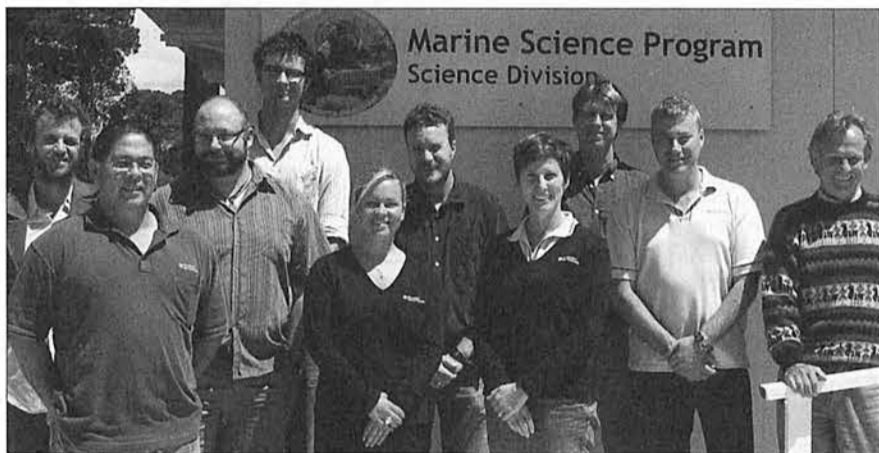
Bush Rangers across the State dedicate their time to projects including planting native gardens, recycling, weeding, native animal monitoring and revegetation.

There are now 49 Bush Ranger units in schools, with more than half of them in rural Western Australia.

The success of Bush Rangers WA was also recognised in the Premier's Awards this year. The program was a finalist in the 'Creating a Healthy, Safe and Vibrant Western Australia' category.



(Left to right) Mt Lawley Senior High School Year 8 students and Bush Ranger cadets Claire Raphael and Jade Dolman, school chaplain and unit leader Andrew Paul, Environment Minister Donna Faragher, DEC Bush Rangers WA state coordinator Alison Hansen and school principal Milton Butcher.



The new Marine Science Program team Richard Campbell, Kevin Bancroft, Michael Rule, Tom Holmes, Shannon Armstrong, Shaun Wilson, Kelly Waples, Kim Friedman, Alan Kendrick and Chris Simpson. Photo - Chloe Shugar/DEC

Increased marine focus

DEC is continuing to strengthen its focus on the marine environment.

Six new permanent marine science employees are joining Marine Science Program Leader Chris Simpson, Principal Research Scientist Kelly Waples and Research Scientist Kevin Bancroft.

Kim Friedman has taken up the position of Principal Research Scientist (Monitoring Coordinator), while Shaun Wilson is the new Senior Research Scientist (Tropical).

Tom Holmes (currently finishing his PhD) and Shannon Armstrong complete the tropical research group as Research Scientists. Alan Kendrick and Michael Rule have taken up the positions of Senior Research Scientist (Temperate) and Research Scientist (Temperate), respectively.

Chris said most of the positions had been taken up by people who had not previously worked for DEC and who had come from outside of Western Australia.

"Kim Friedman previously worked with the Secretariat of the Pacific Community in New Caledonia, while Shaun Wilson and Tom Holmes have come from James Cook University in Townsville," Chris said.

"Michael Rule worked at the National

By Samille Mitchell

Marine Science Centre in Coffs Harbour, Alan Kendrick was formerly DEC Pilbara Region's Marine and Coastal Ecologist and Shannon Armstrong is an original Marine Science Program staff member."

Chris said the new staff brought a wide variety of science expertise to the Marine Science Program.

"They will help to strengthen DEC's ongoing relationships with other marine science organisations," he said.

"This marks an exciting time for the Marine Science Program, formed in mid-2006.

"It enables us to improve our ability to undertake high quality science to underpin the conservation and management of our State's marine protected areas, marine fauna and marine biodiversity generally.

"The Marine Science Program will work closely with the Regional Services, Nature Conservation and Parks and Visitor Services divisions as well as external science providers such as the Australian Institute of Marine Science, CSIRO and local universities."

Five years caring for wandoo

CONSERVATIONISTS from across the south-west travelled to York in October to hear the latest research on wandoo decline and learn about the conservation of wandoo woodlands.

The seminar, hosted by the Wandoo Recovery Group, attracted 100 delegates including community group leaders, land managers, scientists and researchers.

Recovery group members and research scientists from DEC, The University of Western Australia (UWA), Murdoch University and the Tuart Health Research Group highlighted major achievements in tree decline research and mapping, shared information and acknowledged the enormous contributions of rural communities.

Group Chairman and DEC Acting Director Environmental

By Liz Manning

Regulations Alan Sands paid tribute to the group's efforts during the past five years.

"Tree decline is one of the greatest threats to biodiversity in south-west WA, affecting species such as wandoo, jarrah, marri, tuart and peppermint," he said.

"The recovery group was formed in 2003 in response to community concern over wandoo's failing health. It works to support research and coordinate government and community-based actions to develop practical solutions."

As part of efforts to gain a better understanding of when and where wandoo decline occurs, the group coordinates a Woodland Recovery Project, assisted by DEC, WWF-

Australia and a \$71,295 Lotterywest grant.

Many local groups, TAFE students and individuals have taken part in the project which includes community surveys to record and monitor wandoo health, an historical review of wandoo and a public education program.

Survey results spanning six years show that while wandoo decline continues, some areas are recovering. A booklet *Wandoo in health and decline - a history* brings together results of historical research which strongly suggests wandoo decline has only emerged at significant levels since the 1980s.

Alan said researchers at UWA had found that wandoo takes up and uses water differently to other species like jarrah and marri.

"Wandoo can extract large amounts of water from dry soils, but this produces enormous tensions in the sapwood, which can ultimately lead to hydraulic failure if soils dry out to much," he said.

"PhD student Ryan Hooper has identified *Coleoptera buprestidae*, a wood boring insect, as the primary contributing factor in dieback and decline of wandoo trees.

"Understanding the balance between borer populations and tree response is a crucial factor in the decline and recovery cycle, which must be viewed in a time frame relevant to wandoo's life span."



(Left to right) Wandoo Recovery Group Chairman Alan Sands, group member Bruce McGregor, UWA senior lecturers Erik Veneklaas and Andrea Gaynor and DEC research scientist Ian Abbott. Photo - Liz Manning

New discovery centre fires the imagination



Some of the people involved in the Pinnacles Desert Discovery project 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.

THERE are not too many buildings that can lay claim to a baptism of fire but DEC's new Pinnacles Desert Discovery is one that can.

During the construction of the new visitor interpretation centre at the Pinnacles in Nambung National Park, tuart support beams were set alight so the scorching would remind visitors of the significant role fire has played in shaping the landscape.

The new centre was officially opened by Environment Minister Donna Faragher.

Construction on the \$6.1-million development started in June 2006 and the official opening marked the

By Liz Grant

conclusion of a process set in motion in 1999 when DEC commissioned a visitor services and facilities master plan for the area.

Director General Keiran McNamara congratulated all DEC officers involved in the project and thanked them for their efforts. He acknowledged the contributions of district staff over the years, in particular those who had served as district manager: Kelly Gillen, David Rose and Keith Hockey.

He said the centre was a significant tourism asset and that, as an attraction, the Pinnacles had come a long way since the days when complaints about the access road topped the list of complaints about national parks across the State.

"I believe this area has a lot to offer - with the marine park, the Pinnacles and the floristic diversity of Lesueur National Park there is enough variety for people to stay overnight," he said.

"This has traditionally been part of a day trip from Perth and we are working with people in the tourism industry to change that."

WA Youth Environment Conference a success

FUN, enthusiasm and Aussie the Eagle were in the air at the WACA in September as 300 students from across the State came together for the first West Australian Youth Environment Conference.

The conference is run by 2001 Young Australian of the Year Arron Wood and his organisation Firestarter.

The conferences have involved more than 10,000 students from Years 5 to 11 in a 'kids teaching kids' approach.

DEC Community Education Branch supported the two-day event helping young people gain research, presentation and performance skills so they can teach others about environmental issues.

"I was really impressed with the school presentations, a major component of the conference," Branch Manager Greg Allen said.

"These were on themes such as Christmas Island 'red crabs' threatened by 'crazy yellow ants' or the kids from Baldvis who battled major development with their children's forest.

"The students developed the material themselves and were highly professional – using PowerPoint, scale models, performance and interactive activities to engage their audience and get their messages across. It was so inspiring."

Greg said one of the highlights was a talk by young scientist and winner of the environment category of the 2008 WA Youth Awards Simon Cherriman who shared his passion for wedge-tailed eagles and his love of the environment and its creatures.

"Simon's energy certainly rubbed off on the students and teachers and his presentation was made even livelier with a special appearance from the West Coast Eagles Football Club's mascot Aussie the Eagle," he said.

"The kids were eager to ask questions of the environment and climate change panel featuring experts from Murdoch University, Edith Cowan University, Millennium Kids, Water Corporation, KPMG and Gardening Australia's Josh Byrne," Greg said.

While the first day of the conference focused on the 'head' and 'heart', the second day focused on the 'hands' – putting knowledge into action.

"Students visited the Baldvis Children's Forest, Aquinas College and Cockburn Wetlands where they partnered with organisations for activities such as tree planting, drilling for dieback, native animal care and EcoEducation," Greg said.

DEC was a major sponsor of the conference, which is planned to be an annual event.



The Mitsubishi Four-Wheel Drive Club and DEC Bush Rangers after rehabilitation works at Leschenault Peninsula Conservation Park. Photo – Tony Weldon

Teaming up for rehabilitation at Leschenault Peninsula

DEC has joined forces with the Mitsubishi Four-Wheel Drive Club, DEC Bush Rangers and other school students to tackle environmental protection at Leschenault Peninsula Conservation Park, just north of Bunbury

Funding through the South West Coast Action Grant enabled DEC to undertake the work with the four-wheel drive club and DEC Bush Rangers, who are from Bunbury Catholic College.

The group fenced rehabilitation areas, collected seeds, propagated plants, planted vegetation and rehabilitated sand dunes. They also worked to manage weeds, clean up rubbish and maintain signs and park facilities.

A follow-up work day was held with community service students from Bunbury Cathedral Grammar School helping to plant 1,000 trees and conduct rehabilitation works in the dunes near The Cut, an artificial

By Joanna Moore

channel in the mouth of the Leschenault Estuary.

Parks and Visitor Services Operation Officer Bev Gardiner said the work was of great benefit to the department.

"Off-road vehicles have caused an increase in sand erosion from the dunes and a decrease in plant cover at Leschenault Peninsula and the work significantly helped with these issues," she said.

"The grant also enabled the planting of trees in the Belvidere area to assist with the site's rehabilitation."

The Mitsubishi Four-Wheel Drive Club has been volunteering at Leschenault Peninsula Conservation Park since 2000 and undertakes two trips each year to help in rehabilitation works, seed collection and general maintenance.

AELERT comes to Perth



(From left) Legal Services Branch Manager Sonya Krishnan, Director of Sustainability Stuart Cowie, Manager Nature Protection Branch David Mell, AELERT Chair Greg Sullivan and Manager Regulatory Training Kym Squires at the conference. Photo – Joanna Moore

THE fifth Australasian Environmental Law Enforcement and Regulators Network (AELERT) conference brought together experts in environmental regulation in Perth during October.

The conference provided an opportunity to discuss key issues and new ways of enforcement and investigation of environmental offences.

DEC Manager Nature Protection Branch David Mell said the conference was a great opportunity for DEC staff to listen to and interact with their counterparts and experts from around Australia and New Zealand.

"A wide cross-section of DEC people attended, including staff from the Native Vegetation, Nature Protection, Legal Services and Industry Regulation branches, the Environmental Enforcement Unit and the Swan River Trust," he said.

More than 230 people attended the conference which had the theme 'The way forward: risks and opportunities'.

Environment Minister Donna Faragher opened the conference. DEC Director General Keiran McNamara gave an overview of the diversity and complexity of environmental regulation issues in WA and discussed the value of compliance and regulation and the benefits of working with AELERT.

Keynote speakers included Professor Richard Macrory and Dr Paul Leinster, both from the United Kingdom, AELERT Chair Greg Sullivan and Len Roberts-Smith from the Corruption and Crime Commission.

For the first time the conference included three workshops. They focused on the topics of wildlife, good sentencing and regulatory practice.

A range of interesting case studies gave participants the chance to discuss their experiences in regulatory practice, legislative drafting, licensing, policy writing, compliance monitoring, audit and the investigation and enforcement of environmental offences. The case studies included several complex investigations, the use of remote sensing and surveillance equipment, developing a regulatory compliance program, the benefits of networking and the challenges in vegetation regulation.

David said AELERT's objective was to improve the capacity of member agencies and to build relationships to enable information sharing, particularly between jurisdictions.

"Neither environmental impacts nor environmental criminals observe jurisdictional boundaries, so by working together regulatory agencies can do their job better," he said.

"The conference provided an opportunity for DEC to be seen as a national leader in the ethical, lawful and effective regulation of natural resources and to enhance the professionalism of our compliance officers."

This year was the first time WA had hosted the AELERT conference, which was held at the Esplanade Hotel in Fremantle.

Koodah wins a multicultural service award

ABORIGINAL Heritage Unit's Cultural and Community Coordinator, Terry 'Koodah' Cornwall has been recognised as achieving excellence and innovation in advancing multiculturalism, inclusiveness and participation in Western Australia.

Koodah won in the individual category of the Multicultural Community Service Awards, run by the Office of Multicultural Interests.

Koodah was presented his Award by the Hon John Castilli MLA, Minister for Citizenship and Multicultural Interests at a ceremony at Government House.

"The 2008 Western Australian Multicultural Community Service Awards provide an opportunity to acknowledge the positive contributions in the areas of empowering culturally and linguistically diverse groups, combating racism and promoting social justice," Mr Castilli said.

When Koodah started work with DEC in 1990 he was one of only a few Aboriginal employees. Aware of the limited knowledge of Aboriginal culture within the agency he made it one of his career objectives to educate staff, volunteers and the community about Aboriginal culture, heritage and the Nyoongar language.

Since then, Koodah has been instrumental in developing and delivering training programs such as cultural heritage and cross-cultural awareness training, and activities for Cultural Protocol Day, Bibbulmun Yorgas (women) and Noongar acknowledgement sessions.

This training plays a significant role in increasing the awareness of Aboriginal culture and heritage among DEC staff, who benefit from the training on personal and professional levels.

It also works to ensure Aboriginal perspectives are incorporated into planning, operations and management of land and waters under DEC management.

By Catherine Jack

Koodah has been instrumental in bringing about the development of a DEC wide policy on 'Welcome to Country' and 'Acknowledgement of traditional custodians' and other protocols for recognising and involving Aboriginal people.

DEC faces many management challenges, including those presented by jointly managing WA's lands and waters with Aboriginal people.

Koodah plays an important role in improving the relationship between the department and Nyoongar people, groups and organisations, some of which have in, the past, been reluctant to engage with the department.

Through this two-way communication, Koodah has also gained invaluable insight into the additional needs of Aboriginal groups and ways DEC can improve its communications.

"Koodah has been an invaluable asset to the department and the community and on behalf of DEC I would like to acknowledge and congratulate Koodah on this achievement," Director General Keiran McNamara said.



Koodah Cornwall with his award. Photo – Catherine Jack

Conservation Commission tours the Midwest

MEMBERS of the Conservation Commission of WA headed to the Midwest recently to find out about the significant challenges facing the rangelands.

Conservation Commission Chairman John Bailey said members gained great benefits from such trips.

"Not only are we always impressed by the dedication and hard work of DEC staff, but we are also reminded of the challenges ahead in expanding the State's reserve system to become world-class and to protect the biodiversity values of our global biodiversity hotspot," he said.

The five-day tour started with a briefing from the Australian Wildlife Conservancy at Mt Gibson to learn about their on-ground operations and experience in managing property adjacent to mining tenements.

An aerial tour over Mt Karara and surrounding banded ironstone formations helped the commissioners gain a broader understanding of the impacts of mining exploration and the degree of impact likely with proposed future operations. The aerial tour was followed by briefings from Midwest and Gindalbie mining companies.

The group also met with local council representatives to discuss mining in the region and the many factors that need to be considered in expanding the conservation reserve system.

A number of other issues were highlighted during tours of



Conservation Commission members and staff with DEC staff at Kalbarri. Photo - Kelly Boxall

former pastoral leases which are to be incorporated into the conservation reserve system.

"As the status and intent of the State-owned lands of the region evolve, opportunities will arise to develop partnerships

with tourism and heritage entities," John said.

On their tour of former pastoral stations Mt Karara and Muggon, the group witnessed the positive signs of regeneration through de-stocking, such as amazing displays of wildflowers and birdlife.

Travelling to the Kalbarri region gave the commissioners an insight into the challenges and opportunities for cooperation between the heritage, tourism, conservation and mining sectors.

"We were also impressed with the innovative infrastructure development in Kalbarri National Park which is helping manage increased visitor numbers," John said.

Throughout the tour, information was provided by DEC experts in botany, mining, pastoral lands acquisition, park management and operations.

"The success of the tour must be attributed to the planning and enthusiasm of DEC people from the Geraldton office, in particular Kelly Gillen and David Rose," John said.

"Members of the Conservation Commission will incorporate insights gained during this valuable field experience into management processes.

"Overwhelmingly, members of the commission agreed that the dedication and commitment of DEC staff provided great confidence that the management of vested lands in the rangelands is in excellent hands."

Community spider search a success

IT was called 'SpiderBlitz 2008' and nearly 50 people joined the search for some of our rarest spiders.

The 24-hour intensive field survey to search for two of the Avon region's most threatened trapdoor spiders was planned to increase understanding of the species' population structure and habitat preferences.

Volunteers spent 200 hours searching for the reclusive invertebrates in Minnivale Nature Reserve near Dowerin in the central Wheatbelt. They found 372 new spider burrows and established 20 population monitoring points.

DEC Ecologist Mick Davis said they gathered information on the location, size and condition of the spider burrows during the search.

"Most people don't think of spiders as threatened species, but learning more about these endangered invertebrates helps us to protect them and other species, and to better manage our State's conservation reserves for the future," he said.

"These Gondwanan relicts are threatened by habitat loss, fragmentation and degradation across the Wheatbelt."

By Joanna Moore

The two-day event gave local community members, schoolchildren, university students, scientists and environmental officers the opportunity to get out in the field together to learn more about threatened trapdoor spiders and hunt for burrows.

WWF Community Engagement Project Officer Sally McPhee said there was a fantastic turn out of people from a wide range of backgrounds, including a big contingent of local residents.

"It was great to see the enthusiasm of community members in searching for spider burrows and people came away confident in their abilities to locate and identify these species in the field," she said.

The trapdoor spiders disguise their burrows with doors made of leaves and bark. They join twig 'trip lines' to the burrow's rim and strike out from under the door when prey walk over them.

DEC helped run SpiderBlitz 2008 in partnership with WWF through the *Back from the Edge* project, an initiative funded by the Avon Catchment Council.



Senior Research Scientist Anne Cochrane checks seeds germinating in a temperature gradient plate at the Millennium Seed Bank in the United Kingdom. Photo - DEC

Highlighting the vulnerability of seeds to climate change

DEC's Threatened Flora Seed Centre is using new equipment to help understand the effects of climate change on seed germination.

They are working with an incubator, called a temperature gradient plate, which is a highly efficient, bi-directional temperature gradient system for investigating the responses of seeds and other small organisms to temperature. It enables up to 196 different conditions to be tested simultaneously.

The equipment is being used to test the vulnerability of plant species to a warming climate. Temperature profiles of different species will show seed response to minimum, maximum and mean temperatures, as well as temperature fluctuations.

The Threatened Flora Seed Centre in Kensington is responsible for the collection and conservation of seeds from threatened WA flora. Seed conservation supports the survival

of plant species in the wild by providing genetic material for flora reintroductions. Investigations into seed germination and dormancy provide important information that helps the recovery of plant species.

The centre's manager, Senior Research Scientist Anne Cochrane, said the temperature gradient plate would enable her team to identify threatened plant species that might be adversely affected by climate change.

"Predicting species' response to climate warming from plant functional traits can help identify species vulnerable to extinction," Anne said.

South Coast Natural Resource Management Inc. has bought the equipment which will be used in the DEC office in Albany. Identical equipment is being used at the Seed Conservation Centre at the Adelaide Botanic Gardens and at the Millennium Seed Bank in England.



The volunteers with DEC Ecologist Mick Davis (front row, third from the left). Photo - DEC

Celebrating people behind the track

THE 10-year anniversary of the new alignment of the Bibbulmun Track was not just a celebration of a world-class walk trail, it also provided the opportunity to celebrate the people who worked to make it so special.

Among the crowds attending the anniversary celebrations in Kalamunda in September was former Department of Conservation and Land Management (CALM) Director of Forests Peter Hewett.

DEC Visitor Services Assistant Director Tracy Shea said Peter had played a key role in organising the alignment of the original Bibbulmun Track.

"Without people like Peter we probably wouldn't have the Bibbulmun Track today," Tracy said.

"Peter is confined to a wheelchair now, as a result of a long battle with Parkinson's disease.

"However, he and his wife Beverly did come along to the event in September - it was really special to see them there on the day."

By Samille Mitchell

Tracy said Peter and others championing the Bibbulmun Track had faced a big challenge as forest recreation had not been readily seen as a legitimate part of multiple use forest management.

"About 35 years ago, when bushwalker Geoff Schafer first put forward the concept for the track, people did not see recreation and forest management working together," she said.

"So, Peter, who was appointed in the early to mid-1970s to head up a new Recreation and Extensions Branch in the Forests Department, had the immense task of changing perceptions about recreation in the forest and then dealing with a host of different agencies to win support for the track.

"But thanks to his work, and the work of others like him, the Bibbulmun Track is there for us all to enjoy today."



Former CALM Director of Forests Peter Hewett and Geoff Schafer, who conceived the idea of the Bibbulmun Track, meet at the 10-year anniversary of the realignment of the Bibbulmun Track. They last met at the first end-to-end walk in 1979.

Weeds under fire in the Porongurups

DEC is working to combat weeds in the Porongurup National Park thanks to \$280,000 in State Government funding.

The funds come on the back of a wildfire that burnt 2,620 hectares of national park and 2,500 hectares of private property in February last year.

The fire killed a considerable proportion of weeds in the park, creating an opportunity to control what remains and greatly enhance protection of the park's biodiversity.

Of the 113 weed species recorded in the park, 12 major species will be targeted in the new weed control project.

A full-time DEC weed coordinator will manage weed-control activities in the park, working with the equivalent of six staff for 22 weeks under DEC's Remote Regions Nature Conservation program.

Albany-based DEC Operations Officer Greg Freebury said the work would

By Samille Mitchell

mainly involve on-ground spraying over a 12-month period.

He said it was important to eliminate or significantly reduce populations of the highly invasive weed species as soon as possible, to avoid them re-establishing.

"Autumn and winter rains have prompted new weed germinations but populations can still be controlled with a concerted effort," he said.

"But if we don't act soon, the growth will reach the point where control is no longer a viable option.

"It's important we take this opportunity to safeguard the future biodiversity of the national park.

"By controlling weeds we help native flora to prosper, as well as the fauna that relies on it."



DEC employees Dan Biddulph and Gen Harvey planting at Bell Track with students from Ravensthorpe District High School.

Seedlings planted at Bell Track to prevent spread of dieback

THOUSANDS of native vegetation seedlings have been planted in an isolated micro-catchment in Fitzgerald River National Park to protect the area from the spread of *Phytophthora* dieback.

The planting is the latest in a series of management strategies by DEC to contain the infestation of the disease which threatens the world-renowned biodiversity of the national park.

DEC Project Officer Maria Lee said one of the strategies was to manage surface water in the infested area and prevent it carrying the disease into the rest of the national park.

Maria said almost 9,000 seedlings were planted to divert a large proportion of the rain falling in the area and replace

some of the plant structure that was lost due to the spread of dieback.

"Reconstruction occurred in the deep, sandy soils of the micro-catchment where much of the original native vegetation has been destroyed, leaving only low water use grasses and denuded areas," she said.

"Much of the vegetation destroyed by dieback was thickets of banksias and lambertias, which also provide a habitat and food source for native fauna."

The seedlings were collected from five species in the Fitzgerald River National Park last spring and summer.

After being propagated by a nursery, the seedlings were hand-planted by DEC staff,

volunteers and Ravensthorpe District High School students.

To ensure the planting activities didn't spread the disease into uninfested areas, the group followed strict hygiene practices.

Managing surface water flow in the micro-catchment is a priority and the construction of engineering structures to divert and slow water run-off is being considered. A 12-kilometre fence has also been constructed to prevent animals spreading the disease.

Another strategy to contain the disease included the installation of a three-kilometre, two-millimetre-thick plastic membrane to act as a physical barrier to root-to-root transmission.

Naomi's passion recognised

TRAINEE Naomi Dann has been recognised as a finalist in the Aboriginal and Torres Strait Islander Student of the Year for 2008.

Naomi began her career with DEC in 2007 as a trainee in the Mentored Aboriginal Training and Employment Scheme (MATES) and was nominated for the Department of Education and Training's WA Training Awards 2008.

Deeply spiritual, Naomi has grown up with a strong affection for her natural environment and, with her fellow MATES trainees, has demonstrated her passion for the environment and working on country.

As a coordinator of the Aboriginal cultural program 'Windspirit Dreaming' at Walpole Primary School, Naomi is using art to teach students the importance of protecting Australia's natural environment.

Naomi believes she can never have too much training and is focused on achieving her goal of gaining a role as a Parks and Visitor Services Ranger.

The Aboriginal and Torres Strait Islander Student of the Year for 2008 was announced at the WA Training Awards Presentation Dinner at the Burswood Entertainment Complex in September. Naomi received a finalist's award sponsored by mining company Newmont Australia.

CleanRun recognised with industry environment award



(Left to right) CleanRun community education coordinators Gareth MacRae and Tina Stockport with Toll IPEC State Manager Kenton Muller and drivers Darryl Mills and Murray Frost.

DEC's CleanRun team scored a victory recently by helping its program partner, Toll IPEC, win a national industry award.

Transport company Toll IPEC was awarded the Australian Fleet Managers Association (AfMA) Fleet Environment Award at the annual awards in Melbourne.

The company won the award following the success of an Australian-first trial conducted by CleanRun that worked with drivers to voluntarily reduce unnecessary idling of their vehicle. Based on the outcomes of the trial, a program was developed which is being rolled out with drivers across the industry to reduce emissions through better driving habits.

It is expected that a company of 80 drivers who take part in the program can save \$45,000 each year in diesel and reduce carbon dioxide emissions by 65 tonnes.

The AfMA awards celebrate the achievements of businesses across Australia's transport sector. Criteria for the Fleet Environment Award included evidence of innovative practices, reporting of measurable results and adaptability of initiatives to other fleets.

CleanRun's Gareth MacRae attended the ceremony with the Toll IPEC management team.

"It was a great occasion for both Toll IPEC and the CleanRun Behaviour Change Initiative," Gareth said.

"Hopefully, this will show other transport companies that changing driver behaviour is a viable and immediate means of cutting emissions and saving fuel."

Toll IPEC's WA State Manager, Kenton Muller, collected the award on behalf of his fleet's drivers.

"Our employees were really the ones who embraced the idea and helped develop the program," he said.

Toll IPEC driver Fernando Lopez said drivers appreciated being recognised for their efforts.

"Because of this award maybe other companies will take on this program," he said.

The company is now implementing the anti-idling initiative as a standard operating procedure across the national fleet.

The CleanRun behaviour change program is one of a suite of initiatives in DEC's CleanRun program that seeks to improve Perth's air quality by reducing vehicle emissions.

Toll IPEC was also a finalist in the WA Environment Awards in the Corporate Business Leading by Example category for its participation in the CleanRun behaviour change program.

For more information contact Gareth on 6467 5123 or gareth.macrae@dec.wa.gov.au or Tina Stockport on 6467 5140 or tina.stockport@dec.wa.gov.au.

Propagating bushland plants training a success

FOR some, bushland management is on a grand scale, for others the work is in the detail.

At the request of *Land for Wildlife* members in the Wheatbelt Region, a successful training day was held on propagating bushland plants. To provide the training, DEC's *Land for Wildlife* program accessed some of the excellent talent in its membership and complemented it with skills from the department.

Barbara Abbott, a *Land for Wildlife* member from Brookton, has a background in propagating plants from cuttings and has devoted her life to preserving some of the special plants in the area.

After moving to Brookton, Barbara gained permission from the shire to take cuttings from attractive flowering plants that were about to disappear under the grader at the rubbish tip.

By Avril Baxter

At the training day, Barbara shared her experiences in what makes a good cutting and when to take cuttings for different plant species.

Of course, plant material must be taken and sold legally, so DEC Great Southern District Wildlife Officer Cameron Craigie detailed this process.

The training day was held on Shirley and Jim Well's property at Moorumbine, east of Pingelly. The Wells bought their six-hectare property in 1998 with the intention of creating a seed production area for local plants.

At the same time they joined the *Land for Wildlife* program and were granted interim membership, which is given to landholders working towards developing wildlife habitat on their property through revegetation and rehabilitation.

Ten years later they are picking local seed from the area and, having reached Shirley's goal of creating habitat for blue wrens on their property, now have full membership of the program.

DEC Wheatbelt Region Nature Conservation Advisory Officer Peter White used the setting to talk about seed collection. Participants learnt about the importance of identifying plant species, which plants to collect from, how to determine collection time, collection techniques, seed extraction and cleaning, storage and general hygiene and safety issues.

Wayne Schmidt Award presented

DEC has a new award honouring the career of retiring and much-admired DEC staff member Wayne Schmidt.

Wayne began working with the then Forests Department in 1971. His career is a long list of achievements which includes being the department's first landscape architect, establishing the Recreation Branch and involvement in the construction and establishment of the Bibbulmun Track.

The award was announced at the Parks and Visitor Services Division annual workshop in October where Wayne gave a presentation about life on Muggon Station, where he and his wife Karen spent the past two years as caretakers on behalf of

DEC's Midwest Region.

Director Parks and Visitor Services Peter Sharp took the opportunity to pay tribute to Wayne and announce the new award for the Parks and Conservation Service.

Peter said Wayne was a man of great integrity, knowledge and professional application.

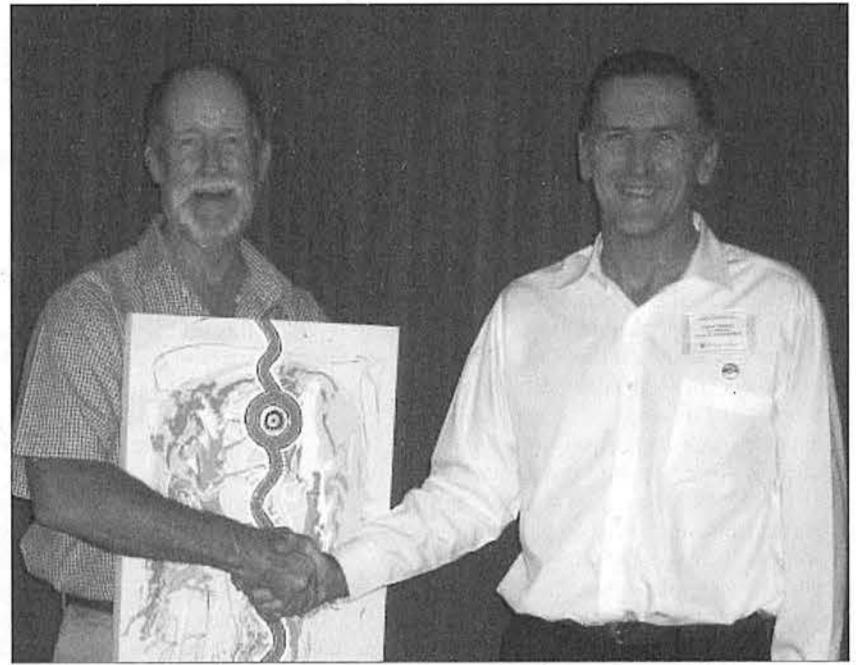
"Through his leadership, Wayne forged a culture of excellence and mentored staff in the division to create the nationally renowned, high quality and innovative recreation and visitor services now provided by DEC," he said.

The award is designed to encourage, support and facilitate staff to enhance and develop these characteristics in their

careers and increase their contribution to the department's mission. It will be granted each year to an outstanding Parks and Conservation Services staff member.

The award comprises financial assistance towards the pursuit of individual or collective excellence and achievement and a 12-month placement of the Wayne Schmidt Award – an Indigenous painting representing an enduring connection with our people and places – at the award winner's work centre. The artwork's partnering piece was presented to Wayne.

The inaugural recipient of the award was Parks and Visitor Services Regional Leader in the South Coast Peter Fishwick.



Wayne Schmidt and Peter Sharp with the Aboriginal painting given to Wayne as part of the inaugural Wayne Schmidt Award. Photo – DEC

Healthy Parks, Healthy Seniors

DEC's *Healthy Parks, Healthy People* seniors' park-based activity program has become so popular that activities are booked out within hours of registrations opening.

The activity program is a partnership with the Office for Seniors Interests and Carers and is aimed at helping seniors realise the health benefits of visiting DEC-managed parks, while at the same time improving activity levels, reducing social isolation and improving mental well-being.

Healthy Parks, Healthy People Coordinator Cathy Gazey said the program targeted people aged over 59.

She said the program now consisted of 10 guided walks a year in DEC-managed parks.

"All of the activities incorporate varying degrees of physical activity, as well as instruction on the natural, cultural and historical aspects of the parks," Cathy said.

"Those who attend the events just love them and feedback from the 2007 program shows that, after taking part in a session, 76 per cent of the participants recognise the importance of the natural environment for good health and well-being.

"Passing on that message and encouraging time spent in nature is what *Healthy Parks, Healthy People* is all about."

Cathy said that 92 per cent of participants reported being satisfied with the program and 91 per cent stated that aspects of their thinking, behaviour or well-being had changed as a result of taking part in the program.

She said although most participants reported being in good health before taking part in *Healthy Parks, Healthy People* activities, all reported that their health had either remained good or improved over the course of the program.

Activities for the 2008-09 program include Experience Penguin Island on 26 February 2009 and Immerse Yourself – Matilda Bay Reserve on 24 March 2009.

Workshops held to assess marine parks

THE Marine Parks and Reserves Authority (MPRA) recently held its annual marine parks and reserves performance assessment workshop in Fremantle.

The workshop brought together DEC people who manage marine parks and reserves from regions and districts across the State. Staff travelled from the Blackwood, Moora, Shark Bay, Exmouth and West Kimberley districts and the Pilbara Region. Perth-based DEC staff from Swan Coastal District, Marine Science Group and Marine Policy and Planning Branch also attended.

DEC Acting Manager of Marine Policy and Planning Branch Fran Stanley said the aim of the annual performance assessment was to gauge the effectiveness of DEC's management of the State's marine parks and reserves.

"For example, the MPRA examines the financial and human resources input and key outputs or achievements such as implementing education programs, undertaking compliance patrols, and conducting research and monitoring.

An assessment is also made of the condition of a range of ecological values, such as seagrass meadows or coral reefs," she said.

The MPRA has an audit framework which includes three levels of assessment – annual, periodic and 10-year. The workshop was coordinated by the MPRA's three member



Chair of the audit subcommittee Trevor Ward with MPRA Executive Officer Alena Kessell and subcommittee member John Henrose. Photo – Fran Stanley

audit subcommittee, which is chaired by Dr Trevor Ward with members included Emeritus Professor John Penrose and Mr Eric Streitberg.

Staff from the compliance, science and environment sections of the Department of Fisheries also took part in the workshop.

"The Department of Fisheries has an important role in managing recreational and commercial fishing in marine parks and reserves and contributes information to the annual performance assessment," Fran said.

From the information presented at the workshop, marine parks and reserves in WA are well managed and in good condition.

"Each marine park has its own management issues," Fran said.

"The workshop provided an excellent opportunity for DEC's marine management staff to get together, meet other staff, exchange information and get ideas on how to manage issues in their park.

"It also enables the MPRA to keep informed of marine park management issues and make an assessment of whether things are improving or not."

New DEC book showcases Shark Bay

SHARK BAY: Twin bays on the edge, is filled with colourful photographs of the bay's unique landscapes and documents the bay's rare beauty, natural heritage and history, including the loss and re-discovery of HMAS Sydney.

Several hundred copies of the 152 page, hard cover book have already been sold.

The book was written by DEC Senior Communications Officer Carolyn Thomson-Dans in consultation with DEC staff from the Shark Bay district and was designed by DEC senior graphic designer Tiffany Taylor.

Carolyn said she first visited Shark Bay in 1988, before it was

declared a World Heritage Area.

"I immediately fell in love with the bay, which was like nowhere else that I had ever seen or even imagined, and was to visit several more times over the next few years," she said.

"I'd like to say a big thank you to all DEC staff who have participated in my visits over the years, as this book would not exist without them."

Shark Bay: Twin bays on the edge retails for \$39.95 from bookshops, newsagencies and tourism outlets throughout the State, DEC offices and online at www.dec.wa.gov.au. DEC employees receive a 20 per cent discount if they purchase the book direct from the department.



Project Eden Manager Colleen Sims, Monkey Mia ranger Shannon Vasyli, Senior Communications Officer and author Carolyn Thomson-Dans, World Heritage Project Officer Cheryl Cowell and Shark Bay District Manager Brett Fitzgerald at the book launch.

Sustainable Schools' success celebrated

THE fourth year of the successful Australian Sustainable Schools Initiative (AuSSI) was celebrated at an event hosted by DEC and the Department of Education and Training.

Staff from DEC's education programs took part in the celebration which brought together more than 200 teachers and environmental educators.

The event aimed to acknowledge teachers' and principals' outstanding contribution to AuSSI and to facilitate the sharing of ideas and resources.

AuSSI is a national program with thousands of participating schools striving to reduce their environmental impact and embed environmental values in their students.

In Western Australia, the initiative is coordinated and implemented by a partnership that also includes the Water Corporation, the Perth Zoo, the Gould League and Millennium Kids.

Community Education Branch Manager Greg Allen said AuSSI supported schools and their communities to live more sustainably. It helped students understand the complexity of

the world in which they live, particularly the challenges they will face as adults, including global warming, water shortages, biodiversity loss and many other important issues.

"The initiative also helps students develop critical thinking skills, values and the capacity to actively take part in decision-making about environmental, social and economic issues," he said.

"AuSSI has significantly improved schools' participation and engagement in DEC's environmental education programs including AirWatch, EcoEducation, Waste Wise and

Ribbons of Blue."

The celebration was held at West Leeming Primary School and entertainment included performances by students who had made all their costumes and props from recycled materials.

The students also showed many of their environmental projects including frog ponds, worm farms, vegetable gardens, composting, a harmony garden filled with native plants, a 50,000-litre rainwater tank, photo voltaic cells and many recycling projects.

The successful function meant many teachers took innovative ideas back to their schools.

LANDSCOPE Expeditions survey the Canning Stock Route

TO mark the centenary of the Canning Stock Route, DEC's LANDSCOPE Expeditions visited the iconic outback track.

Director of the WA Herbarium Kevin Thiele led the group of DEC scientists and expedition participants.

"This magnificent part of remote WA is poorly surveyed," he said.

"For biologists, the Canning Stock Route represents one long biodiversity sampling transect and this trip was an opportunity to gather biological data to enhance knowledge about the biodiversity of this isolated area."

The team of seven DEC scientists and 15 participants were joined by three Martu men from the Parnngurr Aboriginal community, whose country the group was visiting.

DEC Pilbara Regional Leader Nature Conservation Peter Kendrick said the expedition was very fortunate to have knowledgeable Martu people available to accompany it through their traditional lands between Wells 34 and 23.

"It gave participants a glimpse into the lives and culture of people who lived traditionally in this country well within living memory," Peter said.

The group of 25 travelled by four-wheel drive from Newman along the Talawana Track and Gary Highway to intersect the Canning Stock Route at Well 35, on the way passing through parts of the Little Sandy, Gibson and Great Sandy deserts.

By Joanna Moore

After travelling north to Well 34, the expedition moved south, stopping at hot spots to undertake biological research.

"We collected flora specimens and undertook trapping for fauna at specific sites of interest," Kevin said.

"We also collected scats from introduced predators such as foxes and feral cats and feral camels."

Participants included a former teacher, farmers, flora enthusiasts, biologists, historians and a number of previous LANDSCOPE Expeditions participants.

Pat Woolley, a retired zoologist, was there with the hope of discovering a small carnivorous marsupial called *Dasymercus* in which she has a particular interest. The rat-sized animal, which has very sharp canine teeth and a short black-tipped tail, is more widely known as a mulgara, but was once called 'Canning's little dog'.

"The species was very common on the Canning Stock Route in the early 1930s but since then efforts to find them have been fairly unsuccessful and it was generally thought they'd probably disappeared from the area," she said.

"We were extremely lucky to trap one *Dasymercus* on our trip. It was an exciting



Expedition participants and DEC scientists at Well 26 on the Canning Stock Route, which has been restored. Photo - Kevin Thiele

and significant find which will help fill gaps in knowledge about the distribution of this species."

Kevin said the dynamic and knowledgeable team meant the trip was a positive collaborative endeavour.

"It provided the opportunity to share specialist knowledge among participants and DEC scientists," Kevin said.

"LANDSCOPE Expeditions are not tourist or sight-seeing trips but real scientific expeditions.

"The research we undertook may contribute

to understanding little-known species and even the discovery of new species."

The expedition was the second in a trio of visits to the Canning Stock Route by LANDSCOPE Expeditions and explored its middle third. The first visit was held in 2007 and the final will run next year.

DEC, in association with UWA Extension, run about six LANDSCOPE Expeditions each year.

For more information visit DEC's website at www.dec.wa.gov.au or contact Rohan Swan or Kevin Kenneally on 9335 0401.



Neil Taylor with his life membership certificate. Photo - Tom Tuffin

Neil's dedication recognised

SOUTH WEST Region Parks and Visitors Services Coordinator Neil Taylor has been awarded a life membership to the Friends of the Cape to Cape Track.

The honour recognises Neil's outstanding contribution to the Cape to Cape Track, which extends 135 kilometres from Cape Naturaliste to Cape Leeuwin in WA's south-west.

The track is managed by DEC with significant support from the Friends of the Cape to Cape Track. Neil's is just the third life membership the group has granted.

Neil has been involved with the track since the 1980s.

Friends of the Cape to Cape Track President Jane Scott said Neil's many hours of work had contributed to the track's success.

"His contribution has had many facets - promoting the track, providing long-term vision, gaining funding and support, helping with the track's design and supervising work done by DEC, the friends' volunteers and Green Corps crews to improve and maintain the track," she said. Neil's contribution to the friends' committee has also been significant and long-term.

One of Neil's recent achievements has been the production of new Cape to Cape Track maps, which are available from the friends', DEC offices, outdoor equipment shops and local visitor centres.

South West Region Manager Peter Henderson said Neil's vision and enthusiasm for the Cape to Cape Track has seen it grow from a 1980s concept to the premier walking experience that it is today.

Research guide in the spotlight

DEC's new Community Based Participatory Research (CBPR) Guide for Air Quality Management came under the spotlight at the International Association for Public Participation conference in Adelaide in October.

DEC Community Involvement Environmental Officer Kristie Stevens, who works in the Air Quality Management Branch, presented the guide and outlined a trial involving students at Perth Modern School.

"Air quality monitoring and management is often considered to be a highly technical hard-science and so there have been limited opportunities for the community to be proactively involved in air quality management issues," Kristie said.

"We identified this lack of community engagement as undesirable, so developed the CBPR guide to enable communities to take ownership of air quality management issues within their area."

Using the guide, DEC enlisted about 50 Year 8 students from Perth Modern School, who worked with DEC officers from the Air Quality Management Branch and Public Participation

Planning section, as well university researchers.

After an introduction to air pollution, pollutants, sources and risk mapping, and a demonstration of some techniques for monitoring air quality, the students were divided into seven groups. Each group was then given the task of devising and conducting an air quality monitoring study near their school, which is located near the Northbridge Tunnel.

Kristie said the trial unearthed interesting information about how the guide could be used to involve the community in air monitoring.

"The trial has clearly demonstrated that while CBPR is intended for broader community projects, it can be adapted to meet the needs of secondary schools," she said.

"It highlighted the need to invest significant time with participants, the need to enable participants to determine the study area, rather than have it imposed upon them, and the importance of effective communication.

The CBPR approach will be tested further through DEC's Air Quality Management Community Grants Program, where applicants are required to use the CBPR approach where appropriate.

Rare sunmoth discovered in northern suburbs

THE discovery of a new population of a rare moth in a Sorrento reserve has been a highlight of three years of surveys conducted by DEC.

The graceful sunmoth (*Synemon gratiosa*) is a diurnal moth that is only active from March to early April and inhabits banksia woodlands on sandy soils in Perth's northern metropolitan area.

The future of the rare moth looks more secure following the discovery of the new population of the endangered species in Porteous Park, Sorrento.

Funded by the Natural Heritage Trust through the Swan Catchment Council, this year's surveys also confirmed that two known locations continued to sustain populations of the moth despite two years of minimal sightings.

DEC Swan Region Conservation Officer Nicole Willers said it was pleasing to see the graceful sunmoth had adapted to a wider range of habitats than first thought.

"The sunmoth has been recorded in low densities at eight sites in the northern suburbs, typically in open banksia woodlands. However, this new population surprised researchers by its occurrence in coastal heath vegetation, where it has not previously been located," Nicole said.

"The new population in Sorrento raises the potential of locating more populations of

the sunmoth in other areas of coastal heath vegetation."

Nicole said the urban bushland reserves that formed the sunmoth's habitat were under increasing pressure from a range of threats.

"Fires, weeds, rubbish dumping and changing weather patterns all put pressure on these reserves," she said.

"The sunmoth is thought to only move up to 300 metres, which would make it unlikely to disperse between populations or recolonise sites of local extinction."

"Since 2002, the Friends of Porteous Park group has been removing weeds from the reserve, keeping out veldt grass and re-establishing native species to transform it into a healthy bushland reserve.

The City of Joondalup, with support from the Friends of Porteous Park, fenced 2.5 hectares of remnant vegetation in March this year and the group plans to revegetate gaps between bushland islands.

"The efforts of the group will ensure the graceful sunmoth has the best chance of persisting in this small urban reserve," Nicole said.

DEC will conduct further surveys in suitable habitat in March and April 2009.