



JANUARY/FEBRUARY 2008

DEC battles severe fires across the State



DEC Director General Keiran McNamara (right) and Senior Fire Operations Officer Terry Maher (left) at the Forward Control Point at Yellowdine during the Boorabbin National Park fire. Photo - DEC

DEC fire crews were heavily committed for 24 continuous days as they battled a number of significant fires around the State during a severe start to the 2007-08 fire season. One fire in the Boorabbin National Park in the Goldfields claimed the lives of three truck drivers caught in the blaze.

DEC was assisted by crews from FESA, the Forest Products Commission, Main Roads, St Johns Ambulance, Water Corporation, Police, Telstra, Department of Agriculture and Food and Western Power as well as local shires, landowners, contractors, volunteers and suppliers to fight significant fires in Boorabbin, Fitzgerald River and Millstream-Chichester national parks. Crews attended an additional 25 lightning-caused fires that occurred in the Pilbara, Goldfields, Midwest, Swan and South Coast regions.

Director General Keiran McNamara thanked those who were involved in the firefighting efforts. "DEC staff were brought in from around the State to work very long hours in sometimes extremely difficult conditions to bring the fires under control," he said.

"Each fire presented its own set of challenges and demanded specialist skills and equipment. "These types of 'campaign' fires often have a marked impact on staff and their families. I appreciate the efforts and commitment of everyone involved in the containment of these fires."

Crews worked for 14 days to contain and mop up the fire that started on 28 December 2007 which burnt through 45,000 hectares of Boorabbin National Park and surrounding unallocated Crown land. Tragically three fatalities occurred when a convoy of trucks was caught in the blaze.

Keiran said DEC had begun the process to conduct its own internal reviews to learn from the fire and cooperate fully with a Coronial investigation and likely inquest.

"It was a very difficult fire in sandplain and woodland vegetation, with a perimeter of 220 kilometres, that presented a number of challenges," he said.

"Crews experienced severe weather conditions and unusual fire behaviour. We will learn from this experience to improve our management in the future."

Further south, crews worked to protect important conservation values in a series of fires in Fitzgerald River National Park - one of Australia's most significant conservation reserves and a designated Biosphere Reserve.

The park contains populations of the critically endangered western ground parrot and dibbler. Fire suppression efforts protected these populations in the national park.

Keiran said a major challenge for crews was avoiding the spread of dieback caused by the pathogen *Phytophthora cinnamomi*.

"Crews adhered to strict hygiene practices to ensure that the soil-borne pathogen was not transferred from infested to non-infested areas," he said.

"This had implications for where crews could obtain water, as sometimes using the closest source would risk the spread of dieback disease."

Keiran said another challenge DEC faced during the Boorabbin and Fitzgerald River national parks fires was the threat of fire in other parts of the State.

"We needed to carefully manage the deployment of our crews and resources to ensure there was capacity to respond to fires elsewhere," he said.

DEC's Deputy Directors General confirmed



Kim Taylor (centre) with Environmental Officers Ruwani Ehelephola (left) and Cristina Angel (right). Photo - DEC

KIM Taylor and Jim Sharp have been formally appointed as DEC's Deputy Directors General and bring a wealth of experience and enthusiasm to their positions.

Kim, who has been appointed as DEC's Deputy Director General Environment, joined the Department of Environmental Protection as Director of the Environmental Impact Assessment Division in 1996. Before this, he worked in water resources management at the Water and Rivers Commission and Water Authority of WA.

Kim said the department was facing a number of challenges, including the State's strong economic growth and the number of projects being developed.

"DEC is responsible for a number of important project approvals processes," he said.

"This presents challenges for the department in being both the 'approver' of projects and at the same time having the lead responsibility for protecting and conserving the State's environment on behalf of the people of Western Australia.

"The department needs to have clear policies and well-coordinated processes to ensure that development proceeds in a balanced and sustainable way and that ensure sound environmental outcomes."

Kim has extensive experience in environmental protection matters including being involved in the assessment of many major State



Jim Sharp. Photo - DEC

developments in mining, industrial processing, infrastructure and tourism. He also has substantial experience in environmental matters associated with land planning and development.

Kim said the merger of the departments of Conservation and Land Management and Environment in July 2006 had given DEC a very broad range of responsibilities.

"One of my key roles is to promote communication and interaction between the department's various programs where this can lead to improved environmental and conservation outcomes," he said.

"For example, climate change has the potential to have a significant impact on the conservation of the State's biodiversity so it is important to establish linkages between programs in DEC's

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Walpole takes WA's Tidy Towns crown



Members of the Walpole Tidy Towns Committee (left to right) Montague Sanders, Gary Muir, Dave Tapley, Irmgard Bell and Michael Filby with Tidy Towns sponsor representative from the Packaging Stewardship Forum Jenny Pickles (fourth from left). Photo - DEC

THE small community of Walpole on WA's south coast is the winner of the 2007 Tidy Towns Sustainable Communities Award.

It was the 38th year of the awards organised by the Keep Australia Beautiful Council (WA) to recognise and reward regional communities for their contributions to improving the appearance and environment of their town.

Tidy Towns Sustainable Communities Program Manager Leah Martin said Walpole involved the whole community in a broad range of projects that supported the town's long-term plan for sustainability.

"The community has shown great commitment to

educate its residents about water conservation through community meetings and workshops," she said.

"Other projects included Walpole Primary School's UR Walpole EcoEducation program, waste wise practices, a weed removal program, nature conservation activities and town clean-up events to remove litter.

"Congratulations to all the individuals, community groups, schools, sports clubs and the Shire of Manjimup who contributed to this prestigious win."

Walpole is now in the running for the national Tidy Towns Sustainable Communities Awards to be held in Hobart in April.

Eight regional winners were also announced at the event: Pilbara - Cocos (Keeling) Islands; Kimberley - Djarindjin; South West - Walpole; South Coast - Hopetoun; Great Southern - Cuballing; Central Wheatbelt - Wongan Hills; Midwest Gascoyne - Badgingarra; and Goldfields - Kambalda.

Leah said each of the communities put in a significant amount of work on projects that supported and encouraged sustainable living and which aimed to protect our environment for future generations.

For more information about the Tidy Towns Sustainable Communities program please contact Leah on 6467 5131.

Working Together

All staff will be aware of the two tragedies that have marked the start of this year. Firstly, at the end of December, there was the major bushfire at Boorabbin in which three truck drivers lost their lives on the Great Eastern Highway.

Then, in February, there was the mid-air collision between a plane and helicopter during a feral goat culling operation in the Kennedy Range National Park in which two people were killed including DEC's Carnarvon operations officer Dan Kean.

In each case senior officers of the Department have made personal contact with the families to express our sympathies and to offer whatever explanation and support we can. There have been two other major components of our responses.

The first has been to recognise and respond to the distress felt by our staff involved in the two incidents. Both professional and peer support have been provided, and it has been great to see the way in which staff have looked out for and cared for each other in these circumstances. One of the strengths of our agency is the loyalty and commitment of staff to each other and to what we do, and it is great to see this shine through in such trying times.

The second has been to initiate our own reviews, as well as cooperate with external investigations that are underway. This is not about apportioning blame, but rather about using the lessons to strengthen both the organisation and our performance for the future.

I would like to thank all involved for their continuing dedication and support for each other in these very difficult circumstances.

Keiran McNamara, Director General



BIF focus for special *Nuytsia* edition



(Left to right) Senior Research Scientist Terry Macfarlane, Ryonen Butcher, Kelly Shepherd, Minister David Templeman, Juliet Wege and Senior Principal Research Scientist Dave Coates at the *Nuytsia* launch. Photo – Katie Schoch

THE most recent edition of Western Australia's journal of systematic botany, *Nuytsia*, focuses on the biodiversity of the mineral-rich banded iron formation (BIF) ranges.

The publication is the result of a major taxonomy project under DEC's *Saving our Species* biodiversity conservation initiative.

DEC Research Scientist Juliet Wege said the project aimed to resolve the taxonomy of unnamed plant species in WA, especially those that may be vulnerable to future mining activities.

"The special edition comprises 45 manuscripts that focus on scientifically describing plant species endemic to, or with distributions centred on, the BIF ranges of the Yilgarn Craton, the Ravensthorpe Range and Bandalup Hill," Juliet said.

"The current resources boom in Western Australia has increased the prospectivity of these mineral-rich areas.

DEC Research Scientist Al Glen has won the Invasive Animals Cooperative Research Centre (IA CRC) Excellence in Science Award for his work examining the response of native predators to fox control.

Al works at the Dwellingup Research Centre within the Science Division's fauna conservation program.

Al said there were complex interactions among native and introduced predators.

"A greater knowledge of these interactions will enable ecologists and wildlife managers to better understand ecosystem function and how carnivore communities operate," he said.

"My research is looking at the effects of fox control on native and introduced animals, particularly on the chuditch, or western quoll."

Al has published a number of widely cited papers to present ideas and raise controversial issues. His Excellence in Science Award recognises these achievements.

"The taxonomy project focused on these regions because there is a pressing need for a greater understanding of their biodiversity."

Juliet and fellow DEC Research Scientists Kelly Shepherd and Ryonen Butcher co-edited the special *Nuytsia* edition which Environment and Climate Change Minister David Templeman launched.

Kelly said the journal also contained scientific descriptions for a range of conservation-listed species that occurred elsewhere in the State.

"The volume newly describes 95 taxa, 78 of which are listed as being of conservation concern," Kelly said.

Ryonen said the amazing taxonomic output of the special edition was compiled in just 13 months.

"This achievement was only possible in such a short time frame due to the generous support and collaboration of more than 70 botanists from around Australia and overseas," she said.

He received a certificate, trophy and a \$3,000 study and research grant.

Al completed his PhD with the Pest Animal Control CRC at the University of Sydney before taking up his role with DEC last year.

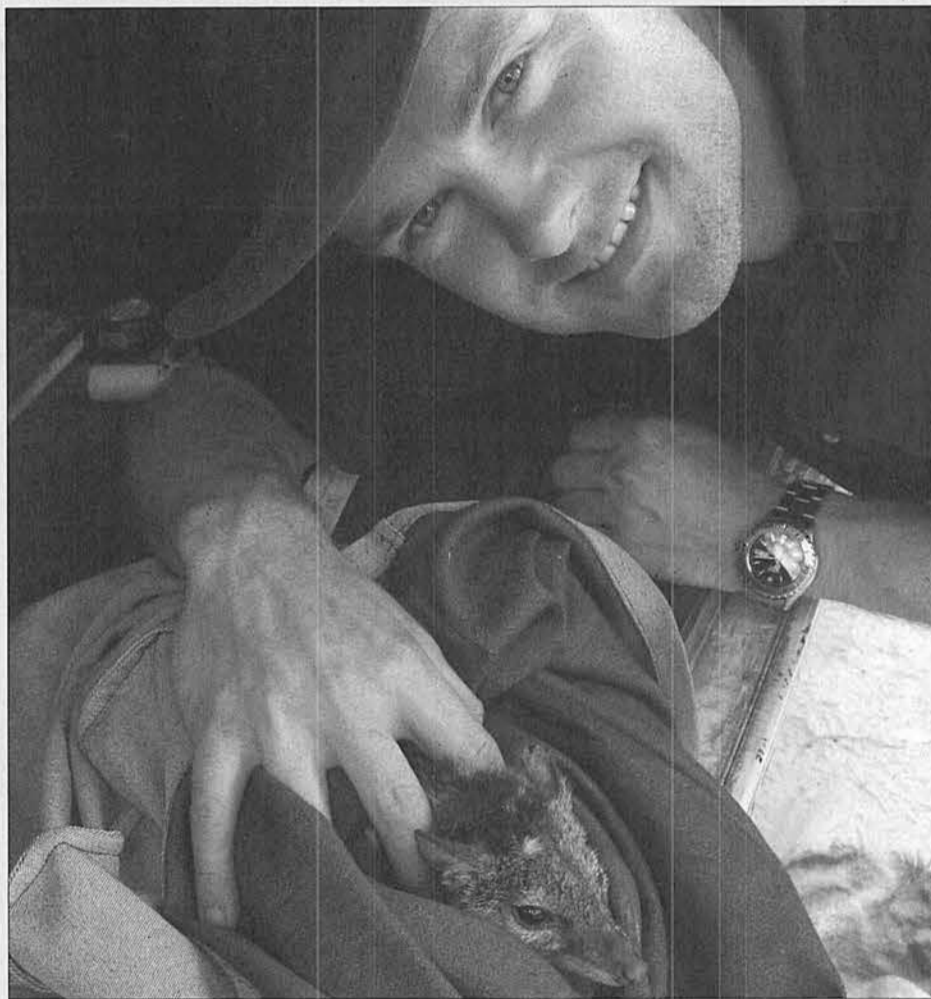
"The shift from central Sydney to the country town of Dwellingup was quite a significant one, but very worthwhile," Al said.

"It has been a real pleasure to live and work in Dwellingup. It's a great community."

Al's achievement is a reflection of the valuable work happening in the northern jarrah forest predator interaction research at the Dwellingup Research Centre, which will build a bigger picture of the complex ecology of the area.

The collaborative project also examines the flow-on effects of controlling the fox, such as how reduced fox numbers impact on feral cat, goanna, woylie, python and brushtail possum populations.

Al Glen wins award



Al Glen with Jennyffer the chuditch. Photo – Duncan Sutherland

Environment and Conservation News January/February 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

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Printed on 100% recycled paper

Agreement boosts Cockburn Sound program

THE Cockburn Sound Management Council (CSMC), which is supported by DEC, and the Kwinana Industries Council (KIC) have signed a new agreement.

The agreement will help support the council's environmental monitoring in Cockburn Sound.

DEC's Environmental Officer for the CSMC, Chris Coffey, said KIC would provide \$90,000 to the council's annual water quality monitoring program during the next three years.

"The CSMC coordinates environmental management and planning of Cockburn Sound, Owen Anchorage and their catchments," he said.

"Monitoring and reporting on the health of Cockburn Sound is one of our key roles. It

allows us to assess whether its environmental values are being maintained and points to issues where investigation or management actions may be required.

"KIC's contribution will strengthen the CSMC's current water quality monitoring program and assist us to expand our scope of monitoring in other areas."

The council's chair, Professor Kateryna Longley, said KIC had been a long-term supporter of the CSMC's monitoring.

"The agreement is a great example of how collaboration between environmental management councils and industry can support independent monitoring programs with the full confidence of the community," she said.

CSMC Coordinator Dr Tom Rose said Cockburn Sound was a vital part of the Kwinana industrial area.

"The CSMC's independent monitoring can help track improvements made by industry and the benefits these are having on Cockburn Sound, as well as highlight areas where improvements may need to be made," he said.

Tom said the CSMC was developing partnership agreements with key stakeholders and encouraging and participating in environmental improvement planning with industry to improve the management of the area.

"Preserving a healthy marine ecosystem in Cockburn Sound requires careful environmental management and planning by all users," he said.

Awards recognise volunteers

THE efforts of 13 passionate DEC volunteers received special recognition on Thank a Volunteer Day in December.

Volunteer of the Year Awards went to Shoalwater Islands volunteers Ruth England and Marian Maughan, *LANDSCOPE* Expeditions biologist volunteer Daphne Edinger and Frankland District biodiversity volunteer Mavis Sowry.

Ruth has spent 18 years volunteering with the department, Marian 15 years, Daphne 25 years and Mavis 12 years.

Outstanding Service Awards went to eight members of the Frankland District volunteer group including Ted Middleton, Colin Steele, Jeanne Steele, Margaret Pieroni, Steve Hawks, Kerry Clark, Gary Schwab and Wendy Schwab.

Bibbulmun Track Foundation volunteer Jim Baker also received an Outstanding Service Award.

DEC Community Involvement Coordinator Marg Buckland was also thanked for her efforts coordinating the 4,500 volunteers working with the department.

Speaking at the awards presentation, DEC Deputy Director General Parks and Conservation Jim Sharp said the volunteers were an inspiration.

By Samille Mitchell

"It's so pleasing to meet so many positive and enthusiastic people working to make Western Australia a better place," Jim said.

Environment and Climate Change Minister David Templeman also expressed his gratitude for volunteer efforts throughout the department.

"Can I acknowledge you – the tremendous men and women of WA who are representative of 4,500 people who have a passion for ensuring our unique flora and fauna and landscapes are not only protected but also shared with visitors," he said.

"We are particularly fortunate in WA to have such a strong volunteer ethos.

"You make a difference, you really do."

DEC's volunteer programs include campground hosts, wildlife rehabilitators, honorary CALM officers, WILDCARE Helpline, regional and national parks friends groups, Bibbulmun Track and Munda Biddi volunteers, turtle tagging volunteers, flora survey volunteers, the Swan River Trust's corporate care days and the Keep Australia Beautiful Council's community clean ups.



DEC volunteers Daphne Edinger and Ruth England. Photo – DEC

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Office of Climate Change and the department's nature conservation programs."

Kim said he had thoroughly enjoyed his more than 30 years in public service.

"What I've enjoyed and valued most is the people I've worked with and their dedication and commitment to their tasks," he said.

"There's always been a common sense of purpose for protection and conservation of the environment."

As Deputy Director General Parks and Conservation, Jim aims for the Parks and Conservation Services to build on the extensive work that has already been done towards conserving the biodiversity of WA and creating a world-class parks system.

"There are many challenges that we face in building on our protected area system and ensuring that biodiversity is maintained across the State," he said.

"These challenges include dealing with the wide range of impacts that overarch this objective, including issues such as climate change."

Jim started with the former CALM in 1985 and his roles have included Manager of the Policy and Extension Branch, Director of National Parks and Director of Parks and Visitor Services.

Jim has demonstrated a strong interest in the establishment, promotion and sustainable use of protected areas and promoting their contribution to maintaining biodiversity.

Jim said there was an opportunity in an amalgamated department to marshal

resources to deal with challenges in an integrated way.

"We have both the opportunity and the responsibility in DEC to respond to the challenges in our own unique way. We need to ensure that our responses lead to an increased public appreciation of the natural values that underlie our quality of life."

Jim appreciates the opportunities presented by his role, including working with motivated, enthusiastic people committed to preserving natural values.

"It will be exciting in the very near future to release the final management plan for the Walpole Wilderness and Adjacent Parks and Reserves, a culmination of years of cooperative effort with the community which is indicative of many such projects across the State," he said.

"It is satisfying to work collectively with others in DEC, with the community and with all our stakeholders to this end.

"What has been most encouraging working in this area has been the level of engagement with the community, particularly those groups who wish to achieve the same outcomes and who enjoy the experience of pursuing a shared vision."

Jim sees one of the greatest challenges of the future as raising the level of public understanding and commitment to what we have to achieve in conservation.

"Understanding and knowledge of what we have to do, ranging from research into threatened species to engaging Indigenous communities, will strengthen this commitment," he said.



Kanyana volunteer wildlife rehabilitators Margaret Robinson and Johanna ter Wiel. Photo – DEC

Volunteers in crucial role

DEC's wildlife rehabilitation program has attracted more volunteers than ever before.

There are now 1,500 volunteer wildlife rehabilitators operating across the State, taking in sick and injured native animals and rehabilitating them for release into the wild.

The program started in 1991 and is regarded as one of Australia's leading wildlife volunteer programs.

Community Involvement Coordinator Marg Buckland said the volunteers were crucial in rehabilitating injured wildlife.

"DEC would be inundated with requests to help sick and injured animals if it weren't for the volunteers," she said.

"Thanks to the volunteers we can help rehabilitate native animals – the volunteers provide an amazing contribution to the community and DEC."

The volunteers work at rehabilitation centres or from their own homes.

They can take part in a two-day DEC Basic Wildlife Rehabilitators' course to learn the techniques required for animal care.

DEC also offers advanced workshops on topics such as wound or burn management and free hour-long talks every three months on topics such as raising baby birds. You can apply for the registration forms for all wildlife rehabilitation courses through www.naturebase.net.

All registered wildlife rehabilitators have identification to show their status and are listed in a WA Wildlife Rehabilitation Directory which is updated annually.

Community members who find sick or injured native animals should call the WILDCARE Helpline on 9474 9055 for advice and to be directed to the closest available wildlife rehabilitator, reptile remover or veterinary service provider.

New licence conditions for commercial operators

NEW and revised handbooks will provide commercial tour operators who carry out activities on DEC-managed lands and waters with up-to-date information and licence conditions.

The new edition of the *Tour Operator Handbook – Marine* and the amended version of the *Tour Operator Handbook – Terrestrial* will assist operators in safely and sustainably operating in each of DEC's nine regions around the State.

DEC Licensing Unit Leader Kate Reading said DEC currently licensed 356 commercial tour operators throughout the State.

"The licence conditions tourism operators must adhere to help achieve a balance between commercial use and conservation of WA's lands and waters," she said.

She said the new conditions, which applied from 14 January 2008, were issued to operators in a binder that fitted into most gloveboxes so they could carry it with them.

"The conditions are distributed to operators in a loose-leaf binder, which means that the text can be updated regularly. We aim to update the conditions every year to ensure they are as current as possible," Kate said.

She urged districts and regions to offer suggestions for future amendments.

"We rely on the people on the ground to enforce the conditions and appreciate their assistance in developing the conditions," she said.

Kate can be contacted on 9334 0516 or by email (kate.reading@dec.wa.gov.au). The handbooks are available by contacting Kate or from DEC's NatureBase website at www.naturebase.net.

LEED fund to help cut emissions

DEC has welcomed the interest in the new \$36.5 million Low Emissions Energy Development (LEED) fund, following the call for applications in early November last year.

Information about the fund was posted on DEC's website and people logged onto the site as soon as the fund was launched and advertised.

The fund is a key initiative in the target to cut the State's 2050 greenhouse gas emissions by 60 per cent below 2000 levels.

The fund encourages the development of new low emissions technology that will help reduce greenhouse gas emissions.

Applications closed on 19 December and successful applications are expected to be announced in the second quarter of this year.

Office of Climate Change Programs Manager Charles Crouch said he was encouraged by enquiries into the new funding program.

"Projects may range from new low emission technology to energy efficient technology," Charles said.

By Samille Mitchell

"The fund will focus investment towards technologies where Western Australia has distinctive natural and competitive advantages such as geothermal, bioenergy and clean coal technologies, as well as renewable energy generation such as wind, wave, tidal and solar power.

"It will also help to ensure WA is at the forefront of environment initiatives – something that is being demanded by more and more people every day."

Charles said funds would be granted on a leveraged basis whereby DEC would pay \$1 for every \$3 committed from alternative funding sources.

This would result in total expenditure of more than \$130 million for initiatives aimed at reducing greenhouse gas emissions.

Special prize for Yanchep

THE Yanchep National Park Volunteer Group has been recognised at the City of Wanneroo's annual Awards for Environmental Excellence.

In line with the awards' theme of local biodiversity, the volunteer group won a special prize for a project that demonstrates commitment to conserving local biodiversity.

The Yanchep National Park Volunteer Group consists of 50 dedicated individuals who are involved in a variety of nature conservation and park maintenance activities.

DEC Yanchep National Park Volunteer Coordinator Christie Mahony was thrilled to accept the award on behalf of the volunteer group.

"As well as all the on-ground biodiversity conservation work the volunteers do, they enjoy spreading their infectious enthusiasm of the natural environment to park visitors," Christie said.

Skills to target arson

AS A part of the State's preparation for the summer bushfire season, DEC, the Fire and Emergency Services Authority (FESA) and the WA Police Arson Squad held a bushfire investigators workshop and field exercise in the south-west.

The workshop explored issues involved with the management of bushfire arson, such as arson reduction programs, management of physical and digital evidence and packaging DEC investigations for handover to the WA Police.

DEC Fire Operations Officer Murray Mitchell said a cross-agency approach was the only way to effectively manage the threat posed by bushfire arson, which lead to half of all bushfires across the State.

"Our cross-agency networking means we have a wide range of skill sets available to us," Murray said.

"DEC's arson investigators' forestry backgrounds are critical to the initial investigation as their understanding of forests and how fires work is central in determining whether the bushfire has been deliberately lit.

By Joanna Moore

"The forensic skills of the Police Arson Squad can then be used to test DNA and other evidence.

"This coordinated approach means we have a 10 per cent clearance rate in gaining convictions in cases taken to court, which is higher than the national average."

As well as the workshops and field refresher courses held throughout the year, regular meetings are held between the three agencies, especially during the fire season.

Murray said DEC's 26 bushfire arson investigators had all completed training with the WA Police and FESA.

"We also work with DEC's Nature Protection Branch wildlife officers who have experience in investigation and compliance and, additionally, have recently enlisted the skills of an analyst expert from DEC's Environmental Enforcement Unit," he said.



WA Police Arson Squad officer Jim Myles, DEC Bushfire Investigator Daniel Hunter and FESA Fire Investigation Unit Manager Phil Cribb investigating a bushfire. Photo - courtesy WA Police Arson Squad



Chandala staff and their families after planting 10,000 seedlings on Chandala Nature Reserve with Tiwest JV Environment Officer Jo Blunn, Tiwest JV Manager Northern Operations Rick Benjamin and Perth Hills District Nature Conservation Officer Bob Huston. Photo - Christine Bean

Teaming up for nature conservation

DEC has joined with a major minerals producer to implement five significant nature conservation projects on nature reserves in the Perth Hills District over the past year.

During 2007, titanium producer Tiwest Joint Venture - Chandala provided \$25,000 to fund projects such as weed control, *Phytophthora* dieback mapping, mapping and eradication of feral beehives and the planting of 10,000 seedlings on degraded land.

Perth Hills District Nature Conservation Officer Bob Huston said the weed control projects had enabled the department to build on the *Saving our Species* projects of 2006 and 2007.

"Tiwest saw the good work we had done through the *Saving our Species* program in significantly reducing the heavy infestations of watsonia and arum lily," Bob said. "So it recognised the value of supporting follow-up work.

"We were able to expand the off-reserve control of arum lily and watsonia to Chandala and Chittering Lakes nature reserves respectively."

The *Phytophthora* dieback mapping projects confirmed that Ippolo and Barracca nature reserves were dieback free and will help keep them that way.

"The nature conservation projects that have been supported through this unique partnership have enabled the Muchea/Chittering district to move a step closer towards improving its regional biodiversity," Tiwest JV Group Leader Environment Parveen Naidoo said.

"One of Tiwest's ongoing commitments is to improve biodiversity through habitat protection and effective property management. We look forward to continuing with these positive changes in 2008."

Over the past three years Tiwest has provided \$75,000 to fund important nature conservation work in the Muchea/Chittering area of the Perth Hills District.

Fire crew skills put to good use on Kangaroo Island

TEN DEC senior fire officers assisted their South Australian counterparts battles fires on Kangaroo Island late last year.

The Western Australian contingent dovetailed into the SA operation and helped ease the pressure on local crews.

Fire Coordinator Greg Broomhall, from DEC's Albany District, said the crew received very positive feedback from the South Australians.

"The team members' skills and knowledge in fire suppression were used very effectively," he said.

The firefighters were in SA for a week and worked in 14-hour day shifts. They mainly worked with the Incident Management Team and had operational people in the field.

"Team members in the field carried out back burning, put in fire lines and provided intelligence to the Incident Management Team for planning purposes," Greg said.



Team members were met upon their return by (left) Terry Maher (Senior Fire Operations Officer) and Director Regional Services Alan Walker (fifth from right) and included Greg Napier (Fremantle), Sam Hurd (Mundaring), Mike Cantelo (Wanneroo), Brad Barton (Manjimup), Leigh Sage (Wanneroo), Greg Broomhall (Albany), Dennis McDonald (Mundaring), Brad Commins (Busselton), Steve Gunn (Dwellingup) and Owen Donovan (Wanneroo). Photo - Sonja Mennen

Briefly...

DEC on show

DEC put on a great show at the three-day 2007 Perth 4WD and Adventure Show at McCallum Park last year. The department's display was coordinated by DEC's Tourism Branch in partnership with the Community Involvement Unit and was visited by many of the 26,000 people who attended the event.

Visitors to the display had a chance to get up close to joeys, birds of prey, snakes and lizards and had access to a range of information about visitor facilities and services on DEC-managed lands and waters.

The campground host program was popular with people seeking information on how to become involved.

Aboriginal park council visits NT

TWELVE Kimberley Aboriginal park council members headed north to meet the Aboriginal managers of Kakadu and Nitmiluk national parks in the Northern Territory.

The Yoorrooyang Dawang Regional Park Council's visit was to gain a broader understanding of how joint management arrangements worked at the two NT parks.

DEC Kimberley Regional Manager Daryl Moncrieff and Miriuwung Gajerrong Project Coordinator Scott Goodson joined the council in the visit.

"Joint management is about bringing together local Indigenous people's cultural knowledge and aspirations and contemporary science and knowledge to manage country for a broad range of values," Scott said.

"The trip was a chance to explore land management in a conservation and Indigenous cultural context, as well as to find out about joint

By Joanna Moore

management structures and processes, training and employment programs and tourism initiatives."

The Yoorrooyang Dawang Regional Park Council was set up in 2006 following the Miriuwung Gajerrong native title consent determination through which an Indigenous Land Use Agreement was developed.

The agreement - the Ord Final Agreement - provides benefits for the Miriuwung Gajerrong people, including a joint management initiative with DEC to manage new conservation areas in the East Kimberley.

"The park council will be responsible for managing six new conservation areas with a total area of about 160,000 hectares near the town of Kununurra," Scott said.

"This area also represents eight Dawang (country) - areas for which the council members have cultural responsibility."

Park council co-chairperson Margaret Moore said the trip

provided the council members with an understanding of both the positive and negative aspects of joint management and the challenges ahead for their park management.



Yoorrooyang Dawang Regional Park Council meeting with the Kakadu board of management at Kakadu National Park headquarters. Photo - Scott Goodson

DEC supports WA Collaboration for Sustainability

DEC's Sustainability Programs Unit has provided \$42,000 to the WA Collaboration for Sustainability, the second time the department has stepped in to help maintain the work of this community-based partnership.

WA Collaboration provides a network and forum for the non-government sector to be actively involved in advancing sustainability.

It is a partnership of leading non-government and community organisations including the Conservation Council of WA, Council of Churches of WA, Ethnic Communities Council of WA, Unions WA and WA Council of Social Services.

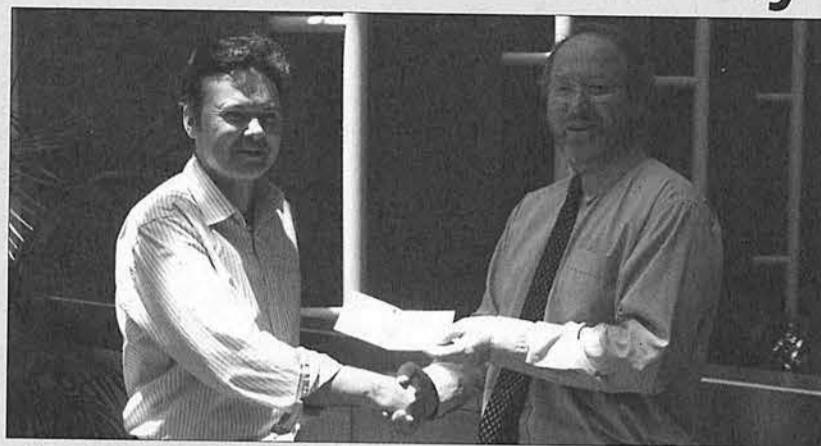
DEC Director General Keiran McNamara presented a cheque to Conservation Council Director Chris Tallentire, who accepted it on behalf of the WA Collaboration. The money will be used

to fund a coordinator who will liaise throughout the community, represent community views on sustainability and foster community awareness through a website and other media opportunities.

DEC's Acting Director of Sustainability Terry Lewis said the WA Collaboration had a unique opportunity to engage effectively with community-based organisations and special interest groups, and the public at large, to help build an appreciation of sustainability and encourage involvement with the sustainability agenda.

"Providing funding is one way DEC supports this group. In addition, staff of the division are always happy to provide advice and guidance in relation to WA Collaboration initiatives," he said.

More information about WA Collaboration can be found at www.wacollaboration.org.au.



Conservation Council Director Chris Tallentire accepting the cheque from Director General Keiran McNamara on behalf of the WA Collaboration. Photo - DEC

Scientific research at Rowley Shoals

By Sue McKenna

DATA generated from a collaborative marine biological survey at the Rowley Shoals Marine Park, 260 kilometres west-north-west from Broome, will be used to protect one of the world's most pristine coral reef environments.

DEC Marine Science Program marine scientists Dr Suzanne Long and Shannon Armstrong, and DEC/WA Herbarium scientist Dr John Huisman, joined an Australian Institute of Marine Science (AIMS) scientific survey which spent 17 days studying the area's marine ecosystems.

They were part of a team of 12 scientists and technical staff working aboard the AIMS research vessel *RV Solander* on its maiden voyage.

Suzanne investigated the mechanisms of coral reef recovery and resilience to climate change, and led the team surveying benthic communities (hard corals, soft corals and algae).

"Decreases in coral cover over time are indicators of either acute or chronic stresses on the ecosystem," she said.

"Changes in the relative abundance of different components of benthic communities will have flow-on effects on local fish and invertebrate populations."

The team found that the coral reefs of the Rowley Shoals are in excellent condition relative to most other reefs worldwide. However, Suzanne stressed this was no reason for complacency.

"In this era of climate change and increasing pressure for resource exploitation, there is a clear need for agencies such as DEC to actively monitor the effectiveness of our conservation management strategies," she said.

"Reefs everywhere, including the Rowley Shoals, are going to suffer increased stress due to climate change, and we need to be able to respond and manage this appropriately. The information we've collected during this survey is going to help with this."

She said the research team had found spectacular soft coral sea fan gardens comprised



Splicing rope for experimental equipment were (clockwise, from front left) Steve Dutton, Kylie Cook, Phil van Dyk, Warren White, Iain Field and Huw Dilley. Photo - Suzanne Long/DEC

of both Pacific and Indian Ocean species, as well as several new algal records.

The survey was backed by \$150,000 from DEC, \$300,000 in-kind support from AIMS and \$30,000 from the Commonwealth Department of the Environment, Water, Heritage and the Arts for shark tagging.

Scientists tagged silvertip and grey reef sharks with acoustic devices, which are now being monitored by sophisticated underwater listening stations. Data collected by the listening stations over the next 18 months will reveal which habitats are important for sharks at the Rowley Shoals, essential information if these vulnerable populations are to be effectively managed.

Shannon Armstrong, who is setting up coral reef monitoring programs at Ningaloo Marine Park and the proposed Dampier Archipelago Marine Park, assisted with a project studying the health of populations of sea cucumbers, Trochus and giant clams. John Huisman compiled a photographic identity guide for the marine park's algal species, an invaluable tool for future monitoring of coral reefs throughout WA.

Suzanne said the scientists considered the Rowley Shoals were vulnerable to unregulated

fishing, an issue they believe merits immediate management attention.

"The isolation is really a double-edged sword, because although it acts to protect the Rowley Shoals from most human impacts, it is also extremely difficult for surveillance vessels to get out there on a regular basis," she said.

Other team members included Jamie Colquhoun (AIMS WA, studying commercially important invertebrates that have been overfished on most Indo-Pacific reefs), Dr Katharina Fabricius (AIMS Queensland, first survey of the biodiversity of soft corals in WA), Dr Iain Field (AIMS Northern Territory, studying shark populations) and Eric Matson (AIMS Queensland, studying climate change).

Suzanne thanked Yalgorup National Park Ranger Steve Dutton and Ningaloo Marine Park Ranger Huw Dilley for their participation in the survey as tender operators.

"These guys were not only extremely capable, they were willing to go far beyond the call of duty under frequently difficult field conditions. They made me proud to work for DEC," she said.

Boating for the future

THE Swan River Trust is keen to receive feedback on the Draft Boating Management Strategy which will guide the future management of boating on the Swan and Canning rivers.

The rivers are under pressure from a big increase in recreational activity caused by the increasing popularity of boating and the growing population of Perth.

Swan River Trust Chairman Charlie Welker said a sustainable and more coordinated approach was needed for river boating management.

"The rivers are beautiful and I encourage everyone, including boating and other recreational communities, to enjoy them. However, it is vital that we manage the impacts of these activities to ensure our precious resources are protected for future generations," he said.

"The aim of the strategy is to promote the use of the rivers for water craft activities without harming the environment or causing disruption to other river users.

"The strategy seeks to provide a coordinated and collaborative approach between local and State governments, the boating industry, community and other river care groups to the future boating management of the rivers."

The Swan River Trust has driven the strategy in consultation with the boating community and regulators. Comments received will inform the development of the final Boating Management Strategy.

For more information visit www.swanrivertrust.wa.gov.au or call 9278 0900. The closing date for submissions is Friday 4 April 2008.

Chief Scientist sees DEC science projects first-hand



DEC Principal Research Scientist Tony Friend showing Chief Scientist Professor Lyn Beazley a Gilbert's potoroo at the Two Peoples Bay Captive Breeding Centre. Photo - Rhianna King

DEC staff recently hosted Western Australia's Chief Scientist Professor Lyn Beazley, who spent a day getting a first-hand look at DEC science projects in the South Coast Region.

In her role as Chief Scientist, Professor Beazley advises the State Government on matters relating to science and innovation policy and funding. She also chairs the Government's science and innovation advisory body.

"We all need to do, translate and communicate science for science to work for WA and Western Australians economically, socially and culturally," Professor Beazley said.

"Seeing projects first-hand gives me a great understanding of some of the issues facing the Western Australian environment."

Professor Beazley was visiting Albany for the Women in Science Breakfast which was organised by the State Government's Working Party for Women in Science and hosted by former Environment Minister Dr Judy Edwards. The breakfast in Albany was the first of many planned for regional WA and was attended by several DEC staff.

"These breakfasts invite women from private business, professional associations, tertiary institutions, research centres and government agencies as well as school students and teachers to come together to network, acknowledge women in science

and encourage young women to consider it as a career option," Professor Beazley said.

As part of her visit, DEC staff took Professor Beazley to Two Peoples Bay Nature Reserve where she saw the Gilbert's potoroo captive breeding program, a dieback research site in Gull Rock National Park and a flora translocation site which is conserving rare plants from the Stirling Range National Park.

DEC Science Director Dr Neil Burrows said he appreciated the opportunity to show Professor Beazley first-hand some of the research that underpins biodiversity conservation management in the South Coast Region.

"Much of what DEC does is based on science and it's encouraging that Professor Beazley has a strong interest in the role science plays in environmental management and conservation," he said.

"DEC boasts a significant capacity to do conservation science, but WA is a big place and we face many challenges, such as biosecurity and climate change, that will require ongoing investment in science to help provide information to manage these issues.

"Professor Beazley had an opportunity to see some good examples of applied conservation science in the South Coast Region."

WA's conservation estate to reach 8 per cent

THE single biggest addition in history to Western Australia's parks and reserves – more than 2.7 million hectares mostly from the Gascoyne and Murchison areas – has been announced.

The lands will be converted into 11 new conservation parks and 14 new nature reserves, or added to existing parks and reserves, bringing WA's conservation estate to more than 20.1 million hectares, or 8 per cent of the State's land area.

Director General Keiran McNamara said the reservation would be a significant step towards creating a world-class parks system.

"Setting aside these rangeland areas is an important step in developing a parks network that is comprehensive and represents all the bioregions in the State," he said.

Eight new conservation parks will be created from former pastoral leases in the Gascoyne and Murchison.

In the south-west, 7,750 hectares of freehold land in 26 parcels will be included in the reserve system.

"Land is selected on the basis of scientific criteria, including habitat condition and quality and the presence of threatened species and ecological communities," Keiran said.

"These areas in the south-west will retain remnant vegetation in what is otherwise a largely cleared landscape."

Mineral prospectivity has been considered in determining the new classification for the land. Existing mining and petroleum tenements on proposed reserves will co-exist following their change to conservation park status.

"Exploration and mining may occur in conservation parks, subject to the normal environmental approvals," Keiran said.

"Sustainable recreational activities such as camping and bushwalking can also occur in conservation parks."

Existing native title rights and interests will be preserved and there will be opportunities for joint management with the traditional owners on the new reserves.

The Commonwealth Government, through the National Reserve System program of the Natural Heritage Trust, jointly funded many of the land purchases with the State Government.

Luke wins inaugural award

IN honour of former DEC employee Geoff Fulford, the inaugural Geoff Fulford Memorial Award has been awarded to DEC Wildlife Officer Luke Bentley at the closing ceremony of the regulatory officer's training course.

Luke was judged most worthy of the 25 course attendees and received bound volumes of environmental and conservation law for his achievement.

Geoff passed away last year after a serious illness and the award was introduced to recognise his commitment to training in the field of environmental regulation.

During his distinguished career with the department, which spanned more than 20 years, Geoff proved himself to be a friend to the environment and true training champion. Geoff worked in DEC's Environmental Enforcement Unit and the Environmental Regulation Division.

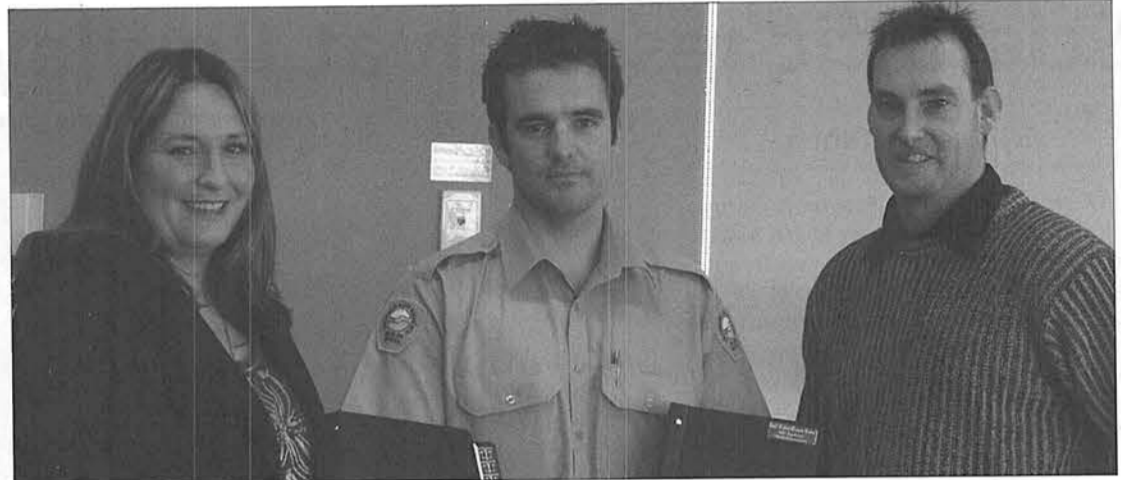
Geoff's philosophy recognised the importance of learning from experience and then sharing that knowledge by developing and delivering credible training.

This epitomises the aims of the regulatory officer's training course which not only provides nationally recognised training in best practices, but facilitates the exchange of information and know-how between diverse areas of the department.

Capability Development Coordinator Marko Pasalich said Geoff put an enormous amount of time and effort into regulatory training over the years.

"It is great to see this achievement recognised and having his family here to present this inaugural award has been tremendous," he said.

The regulatory officer's training course is run four times a year and it is intended that the award will be presented in recognition of high achievement to a worthy attendee at all future courses.



Geoff's daughter and son, Jodie Taylor and Clint Fulford, present DEC Wildlife Officer Luke Bentley with the inaugural Geoff Fulford Memorial Award. Photo – DEC

DEC funds Chinese ornithologists

By Sue McKenna

DEC funding brought two Chinese ornithologists to Broome to study migratory shorebirds along 80 Mile Beach and Roebuck Bay.

Shorebirds and terns use the areas in vast numbers and also stop in China. Fifteen shorebirds banded in China were seen again in Broome.

It was the third year DEC has brought Chinese researchers to the northern town, this time for the annual Australasian Wader Studies Group (AWSG) wader and tern expedition.

Zhang Guangming, an officer at Yalu Jiang National Nature Reserve in north China on the border with North Korea, and Ma Qiang from the Chongming Dongtan National Nature Reserve, near Shanghai, were responsible for the banding program.

They welcomed the opportunity to come to Australia to learn about cannon netting and to study the migratory shorebirds.

They also shared information about the reserves where they work in China.

Yalu Jiang is a 1000-square-kilometre reserve established in 1985 as a City Reserve in China for natural environment, an internationally important shorebird site.

Zhang Guangming said reserve workers had attempted to catch migratory shorebirds with mist nets with little success. During 2007 they caught one bird and in 2006 only seven. Since the tagging program began 200 birds have been banded.

Birds stopping in the reserve are often seen with yellow flags indicating they have been banded in north-west Australia or



Ma Qiang with one of 'his' birds. Photo – DEC

white flags indicating they have been banded in New Zealand. The reserve carries out a combined survey with New Zealand scientists in April and May, and in 2007 DEC's Chris Hassell from Broome was also involved.

The reserve has no sandy beaches on which to catch birds while the large expanses of mud flats were also unsuitable. Shorebirds prefer to stop at the fish ponds at high tide – ideal places to use the cannon netting techniques learned in Broome.

Zhang Guangming said taking part in the three-week expedition was useful and he was confident the cannon netting technique would catch birds at the fish ponds. He will train other staff in the technique. He is looking forward to getting to know other researchers in the flyway and improving communications with them.

He looks forward to receiving plenty of reports of sightings of his green over orange flags in the future.

Ma Qiang from the Chongming Dongtan National Nature Reserve works with traditional hunters in the reserve. The hunters no longer catch birds for the market but take part in banding programs twice a year on northward and southward migration. Ma Qiang coordinates the largest banding program in the East Asian–Australasian Flyway, banding 6,000 birds each year – reflected in the increased number of resightings and recaptures in north-west Australia.

Ma Qiang said he welcomed the chance to learn about cannon netting and the differences between Chongming Dongtan and north-west Australia and improving communications between researchers in the flyway. He was happy to reinforce the strong links between Chongming Dongtan and Broome.

Ninety per cent of the colour-flagged bar-tailed godwit and great knot birds caught in his reserve have yellow flags from north-west Australia.

Next year he hopes to have a bigger banding team which will also look for flags and colour bands from other projects in the East Asian–Australasian Flyway, particularly Roebuck Bay and 80 Mile Beach.

Coastal restoration project receives award for excellence

THE Midwest Region's Coastal Assessment and Restoration project has received a Coast West Coastal Award for Excellence.

DEC Project Officer Brad Rushforth, who has driven the project from the outset, accepted the award in a ceremony held in Denmark.

The award is a credit to Brad's efforts in bringing people together to rectify coastal degradation and address threatening processes along the Midwest coast.

The project won Category 3 – 'Outstanding partnership in coastal planning and/or management'.

The Coastal Assessment and Restoration project is a collaboration between DEC and Curtin University of Technology.

Funded by the Federal Government

By George Watson

through Natural Heritage Trust II and the Northern Agricultural Catchment Council, the project uses Geographic Information System (GIS) technology to identify coastal zones most at risk along 400 kilometres of coastline from Kalbarri to Guilderton. Action is then taken to minimise impacts to the high risk areas identified.

Extensive planning and liaison was undertaken with assistance from DEC's Landscape Planning and Design section to ensure degraded coastal environments received the most appropriate work to speed up natural rehabilitation and reduce the impact of vegetation loss and erosion.

A significant part of the project was the development by Curtin University of a GIS product to help coastal managers identify and prioritise areas of coastal degradation.

The project is designed to occur across all tenures and has led to the development of many partnerships.

Brad said it was an honour to receive the award on behalf of project staff.

"The award recognises the work, commitment and dedication of all project partners in realising the achievements of this important project," he said.

"Many areas of our WA coast require urgent attention due to the effects of erosion and other population pressures. Projects such as this one are important to help protect this significant resource for generations to come."



Brad Rushforth with the Coast West Coastal Award for Excellence. Photo – George Watson

DEC, the Year in Review, 2007

from page 8

September

Ribbons of Blue once again had students across the State rolling up their sleeves to take part in the annual Macroinvertebrate Snapshot which helps give an overall picture of the health of WA's waterways.

A new collaboration between DEC and The University of Western Australia to boost the understanding and conservation of native plants was announced. DEC and UWA signed a memorandum of understanding to share funding for two positions in the university's School of Plant Biology and the WA Herbarium.

And for budding botanists, the introduction of an interactive facility to FloraBase, the website which provides access to the WA Herbarium, made identifying WA's plants even easier.

Charges for unauthorised clearing of native vegetation were laid against a Neergabby resident for clearing 24ha and against a Badgingarra man for clearing an estimated 450ha. The Neergabby woman was fined \$5,000 in November.

War on Waste was the catch phrase associated with a further \$2.3 million allocated to help local governments prepare strategic plans to manage waste. The injection of funds was part of the second phase of the Zero Waste Development Scheme which aimed to encourage local governments to take a regional view of waste management and collaborate with neighbouring local authorities to prevent waste.

A chapter in a five-year journey to manage one of the State's great wilderness areas ended when the Walpole Wilderness Community Advisory Committee signed off on a management plan for the 350,000ha area between Walpole and Denmark.

October

During October the Esperance Port Authority was issued with two Environmental Protection Notices. The first notice required a further clean-up to remove lead dust residues from port infrastructure while the second notice required the port to improve its dust monitoring reporting and programs.

Perth's landfill site were also closely scrutinised when DEC inspectors carried out

a blitz to ensure they were complying with their environmental licences. One operator was issued with two infringement notices for failing to store oils and paints properly.

Doing things properly was a challenge more than met by the finalists in the 2007 Tidy Towns Sustainable Communities Awards. From the 56 towns involved in the program, 15 regional finalists were selected. The overall State winner and the eight regional winners were announced at an awards ceremony in November.

The WA Environment Awards also cranked up a notch with the announcement of 22 finalists selected from a field of 69 nominations. The winners were announced at a function in November.

Information sheets describing the Avon's most threatened species were sent out to 12,000 people in 23 shires across the Wheatbelt as landowners were asked to become involved in the conservation of rare native fauna by reporting sightings of these species.

Grants of up to \$28,000 were made available to community groups involved in protecting and rehabilitating regionally significant sites along the south-west coastline under the South-West Coast Action program.

For the WA Clean Beach Challenge the focus was on finding WA's most beautiful, environmentally healthy and litter-free beach. Organised by Keep Australia Beautiful WA and Surf Life Saving WA, the competition replaced Perth's Best Beach Competition and will conclude with an award ceremony in February.

The likely impact of climate change on WA corals came under the microscope at the Australian Coral Reef Society conference, East Meets West: Marine Science and Management for Australia's Coral Reefs, held in Fremantle. It was the first time in the 82-year history of the coral reef society that its conference was held outside Queensland.

November

Autopsies on seabirds collected in Esperance ruled out pesticides and heavy metals as the cause of death. During October and early November more than 400 short-tailed shearwaters were found dead along the coast between Esperance and Eucla. It was suggested that the deaths could be associated with the breeding season.

More than 500 expressions of interest were received after DEC went international in its search for staff. To counteract the high demand in WA for people with suitable qualifications, advertisements had been placed online and in print media in South Africa, New Zealand, Canada and the United Kingdom.

Reduce, reuse and recycle was the theme of National Recycling Week which aimed to highlight the importance of recycling in the fight against global warming. In Kalgoorlie DEC's Waste Wise Schools Program teamed up with the Kalgoorlie-Boulder Landcare Group and the City of Kalgoorlie-Boulder to organise the Zero Waste Lunch Challenge.

In Perth, DEC's pollution prevention action was mostly about odours. A notice was served on a former fertiliser company director following complaints about a strong fish odour from a Maddington industrial area storage site and an Osborne Park poultry processor, which had been warned to resolve unreasonable odours or face enforcement action, completed preliminary odour reduction works and upgraded its waste treatment. A Wangara factory was warned to cut pollution after complaints about noise and noxious fumes.

December

There was good news for the recovery of two species of threatened birds. Three western bristlebirds, caught at Two Peoples Bay, were successfully translocated to D'Entrecasteaux National Park and 11 Baudin's black cockatoos, hand-reared by DEC wildlife carers, were released into the forests around Nannup.

DEC staff and Murdoch University researchers started preparations for the tagging of 400 loggerhead turtles at Turtle Bay on Dirk Hartog Island as part of DEC's program to conserve the endangered species.

The recently-born Monkey Mia dolphin calf was named Flute after the suggestion was chosen from entries submitted in the naming competition by students from Shark Bay Primary School.

And, as the year drew to a close, fire once again loomed on the horizon. A major fire in Boorabbin National Park between Southern Cross and Coolgardie became a tragedy when three truck drivers were killed.

Nature conservation muster a winner



Marine Nature Conservation Officer Amanda Schell handling a chuditch under the experienced guidance of Perth Hills District Nature Conservation Officer Doug Giles.
Photo - Jessica Allen

By Robert Huston

MORE than 30 nature conservation officers from the Perth Hills District, Swan Coastal District, DEC's Urban Nature program and other regional offices came together for the Swan Region's nature conservation program's first 'muster'.

Regional Leader Nature Conservation David Mitchell said the two-and-a-half-day muster, which was hosted by the Perth Hills District, provided a great opportunity for staff to show each other what they had been achieving.

"It was a chance for staff to celebrate their achievements with their peers and to develop links across the region to improve the delivery of the nature conservation program," he said.

The group toured the Perth Hills District to see the scope of nature conservation projects under way. Projects ranged from innovative weed control trials, research in feral pig control and gravel pit rehabilitation, to small marsupial trapping and handling, rare flora recovery and activities addressing salinity issues.

Swan Coastal District Nature Conservation Coordinator Lyndon Mutter said it was great for Swan Coastal District nature conservation staff to get an understanding of the biodiversity issues in the Perth Hills and to see how they were being tackled.

"While the two districts share many issues, some of the ecosystems and nature conservation projects are quite different," he said.

The muster program also included training and workshop sessions and presentation to raise awareness about key issues such as climate change and what the nature conservation program can do about it at the regional and district level.

The next Swan Region nature conservation muster will be hosted by the Swan Coastal District.

Nice to see you again

By John Hunter

IT goes without saying that DEC quite often depends on the public for both help and fulfilment for a job well done in carrying out its charter.

Marine mammals, while not quite part of the cuddly and furry group, are high on the list of species with which we have a professional and often close personal association, particularly when in need of protection and rescue.

In December, an email was received through the NatureBase website from Julie Fuller stating that while boating in the Peel-Harvey inlet south of Mandurah, her family was thoroughly entertained and given the 'glad eye' by a dolphin with the number 20 on its dorsal fin.

The performance must have created that personal bond that does seem to happen when dolphins interact with humans, as Julie spent the next few days tracking down information. The Bunbury Discovery Centre indicated that DEC sometimes brands stranded animals and so came the email for information.

Senior Wildlife Officer Doug Coughran responded saying that the bottlenose dolphin number 20 was well known to him and others at DEC. The animal and five others stranded in Lake Goegrup north of Mandurah on the Serpentine river on 13 March 1997 when the tide dropped, cutting off the channel to the Peel Estuary.

On that day all six dolphins were rescued and transported to deep water within their home range in the Peel Estuary. As with all strandings, valuable information is collected for use in research. Each animal was numbered, measured and sexed. Dolphin 20's length was 2.035 metres and she was confirmed to be a female. She was in the company of two other females and three males.

DEC officers freeze-brand stranded dolphins by immersing a brand in liquid nitrogen and holding it against the skin - a painless process. The marks may remain for more than 20 years, making it possible to identify any animals that are sighted or stranded again.

Some critics suggest rescue attempts to save stranded whales or dolphins are futile as they will not survive. The undertaking of freeze branding that day has shown that our efforts were not in vain as Julie Fuller's query demonstrates success, nearly 11 years after the rescue operation.

Letters to the editor

DEC values information provided by members of the public, visitors to the lands and waters it manages and users of its services. Below are two emails DEC received.

To whom it may concern

Recently, I had a motor vehicle accident in the Purnululu National Park which left me stranded. A local tour bus driver contacted your ranger, Shaun, who then went out of his way to make sure I was okay, help me make necessary arrangements to get me under way again and ensure I was catered for during my enforced stay (food, shower, bed).

Two of your contract staff, Brian and Jo, also helped out with a meal, hospitality and transport to the airport the following morning. I feel their support was above and beyond reasonable expectation and I would like the department to be aware of this.

Thank you
Ross Lambert

Whom it concerns

On Sunday 19 November, I was out alone, early morning, doing photography at Nambung National Park. Somehow, although they were secured on a lanyard, I lost my rental car keys. Since rain was threatening, and I was on a spur road, I decided to walk to the nearby observation lookout structure. From there I secured a lift into Cervantes. As it was a Sunday, my attempts to obtain assistance with my Auto Association membership were unsuccessful. Meanwhile, your alert ranger - noticing the seemingly abandoned car - initiated a ground search. He found my car keys not 100 metres from the car. Then with the assistance of a Special Constable from the Jurien Bay detachment, I was located at the Cervantes backpackers and subsequently retrieved my keys and car - late in the afternoon. I would like to say I am sorry that I caused concern and I commend your ranger for his entirely professional response - and for his regard for my safety. As I said to him, "I could have been on my face out there in the desert".

Thank you from this visitor to your splendid country.
Yours gratefully
Frank Dwyer
Kamloops, British Columbia, Canada

DEC, the Year in Review, 2007

January

The year started with flooding in Esperance. Severe stormy conditions in the State's south coast region led to parts of Fitzgerald River, Cape Arid and Stokes national parks being closed.

And then there was fire. Following a busy Australia Day long weekend, DEC fire crews were faced with more than 100 fires across the State. While many were contained quickly, several were more troublesome.

DEC also began receiving reports of birds dying in Esperance. Subsequent investigations revealed the cause was lead poisoning. The source of the lead was lead carbonate that was exported in bulk through the Port of Esperance.

The issue became the subject of DEC investigations and a Parliamentary inquiry.

In Lesueur National Park near Jurien Bay fire burned 5,000ha of the park and private property, 2,500ha was burned in Walyahmoning Nature Reserve, north-east of Mukinbudin, and in Julimar Conservation Park, east of Bindoon, a lightning-caused fire burned a further 500ha when strong north-west winds pushed it over containment lines.

Far worse, however, was the Dwellingup fire. Detected on 26 January, the fire burned 4,500ha between Dwellingup and Pinjarra in three days before being contained.

February

Less than a week later Dwellingup residents were being told to 'stay or go' as a flare-up escaped and spread rapidly under north-west winds gusting to 50km and temperatures in the 40s. It burned through 13,000ha of forest and private property and destroyed 14 houses in the Dwellingup area. Escapes from this fire threatened the town of Coolup, resulted in the closure of the South Western Highway at Pinjarra and a flare-up, pushed by strong easterly winds, created a fire front north-west of the Murray River. Overall, 1,000 people were directly involved in the effort to contain the fire.

There was little respite after the Dwellingup fire was contained, however. A fire burned through 15,000ha in Karijini National Park and in the Porongurup National Park a fire that began on private property burned through 4800ha and destroyed two houses.

Valentine's Day put Lake Clifton in Yalgorup National Park, south of Mandurah, in the spotlight when DEC staff responded to a fish kill report. Senior ranger Steve Dutton said the kill seemed to be linked to a breakdown of algal mats and raised salinity levels and appeared to be part of the natural ecosystem processes. The introduced black bream was the only species affected.

March

The start of a new month brought some good news, the first successful cross-fostering of Gilbert's potoroos. The captive breeding program team at Albany, set up to boost the endangered mammal's numbers, had cross-fostered two Gilbert's potoroo young to female long-nosed potoroos in November 2006 and one of them had thrived. DEC principal research scientist Tony Friend said the removal of the suckling young from the Gilbert's potoroo could trigger the mother's endocrine system to develop a second dormant fertilised egg or to stimulate mating.

The trapdoor was then opened on a new population of a rare and ancient spider species, *Moggridgea tingle*, discovered by chance in the Walpole Wilderness Area. The tiny endangered trapdoor spider was revealed when DEC nature conservation officer Karlene Bain was having a look at a spider and bark specimen brought in for identification. A small trapdoor fell open revealing a *Moggridgea tingle* hiding in a 7mm wide burrow.

The discovery of two new flora species in the mid-west region followed soon after. The Northampton everlasting (*Ozothamnus* sp. *Northampton*) and Port Gregory beard heath (*Leucopogon* sp. *Port Gregory*) were found during a routine vegetation survey north of Geraldton which also discovered the first new population of the rare and unusual mulla-mulla (*Ptilotus chortophytum*) for 30 years.

On the environmental monitoring front, DEC finished its review of the State's six



The achievements of DEC staff were celebrated in July at the department's Graduation and Awards Ceremony, which honoured the group of dedicated young people who completed the department's Graduate Recruit Training Program and other award and scholarship recipients. Photo - DEC

major brickworks licences, Environmental Field Notices were issued to a Canning Vale composting facility regarding unacceptable odours, and industry, business and other organisations were reminded that the grace period for reporting contaminated sites expired in May.

Local research into climate change received a major boost when an additional \$8.6 million was committed over the next four years to improve scientific understanding about future climate change conditions and to support better strategic decision-making and adaptation.

A new guide to Western Australia's national, marine and regional parks was released.



DEC's Saving our Species program went from strength to strength in 2007 and included an arum lily eradication project which DEC's Bob Huston (pictured) took part in. Photo - Richard Reid

April

The issue of waste and what happens to it cropped up in April when Newton Primary School was presented with a special sign by the Waste Wise Schools program in recognition of its efforts to reduce the amount of waste sent to landfill. Four-wheel drivers made their contribution by removing five trailer-loads of rubbish from the Powerline Track and Wandoo National Park east of Mundaring when the online forum www.perth4X4.net joined DEC's Adopt-a-Track program.

The community was also encouraged to become involved in the planning for the future management of national parks and nature reserves in the Esperance region when Environment and Climate Change Minister David Templeman released the Esperance Coastal Reserves issues paper.

Feral cat control, the interactions of foxes and feral cats and the reasons for the lack of recovery of some mammals in south-west WA were issues considered when a national review of feral animal research was held at DEC's Dwellingup research site.

Coral Bay was in the news when DEC gave approval for work on the boating facility in Ningaloo Marine Park to recommence after temporarily suspending operations due to concerns regarding possible contamination of the material being used to build the facility.

DEC's own capital works program got a \$12 million boost from the State Budget with funds being allocated to improve visitor facilities and upgrade roads in parks and reserves across the State. Some funding was also allocated for management, monitoring and research activities.

May

The month got off to a flying start with the report on a successful count of Muir's corellas. Teams in the south-west surveyed 22 properties and counted around 9,000 birds adding to the body of information used to manage the threatened species.

To help the next generation of decision-makers distinguish the tuarts from the rest of the trees, a new multimedia education resource about tuart woodlands, the latest addition to DEC's EcoEducation programs, was launched. Raising awareness about compost and turning waste into a resource was the focus of composting week which DEC sponsored and helped to organise in WA for the first time.

The issue of air quality featured several times. First, a brick manufacturer was issued with a \$12,500 fine for failing to monitor at two of three required air monitoring sites and to provide related ambient monitoring, then the department held discussions with representatives of the south-west's grape and wine production industry to resolve grape harvesting and prescribed burning conflicts. Smoke was also behind the consideration of ways to reduce the number of wood heaters being used in Perth in winter.

In a move to get industry to cover the cost of ensuring they comply with environmental regulations, fees for environmental licences, registrations and works approvals were increased on average by around 50 per cent over two years. And in Esperance, stringent monitoring was put in place for the loading of a shipment of nickel while further soil testing at various sites detected lead levels well below health and environmental trigger levels.

June

Alcoa was fined \$20,000 for allowing more than 330,000 litres of caustic residue slurry to flow onto unsealed ground at its Wagerup Refinery and, in Kwinana, a resource recovery operator was charged with carrying out work that caused a premises to become a prescribed premises without a works approval. But it was not only industry that was found to be in breach of licence conditions. A Willetton reptile fancier was fined more than \$1,600 for failing to submit quarterly returns in 2006.

Trapping in jarrah forests near Dwellingup revealed a dense population of the chuditch, a threatened native species. Six new hammer orchids with bizarre sex lives were discovered in the south-west. The orchids have flowers that resemble female wasps to encourage male wasps to pollinate them, an adaptation described by DEC Threatened Flora Recovery coordinator Andrew Brown as remarkable.

In more good news, a \$600,000 capital works program to improve visitor facilities in parks in Perth's northern suburbs was announced, the Minister sought Commonwealth support for the World Heritage listing of Ningaloo Reef and



The State Government's ACT NOW for the future campaign, led by DEC, was launched on World Environment Day on 5 June.

part of the North West Cape, and the release of a draft report on nature-based tourism gave the public the opportunity to help shape the future of tourism in protected areas.

July

Recycling was the recurring issue of the month with the launch of an organic recycling and sustainable gardening brochure and poster resource kit, the allocation of more than \$900,000 funding to projects investigating the use of recycled concrete in road base and waste glass in asphalt, and the announcement of a ban on the disposal of used tyres to landfill in Perth and some regional centres by 2011 as part of a move to promote the recycling of old tyres.

Packaging that ends up in landfill was also under consideration. New regulations requiring businesses to take more responsibility for packaging that ends up a waste were introduced and set specific targets for all companies in the consumer packaging supply chain.

At the other end of the landfill chain was a Hazelmere landfill company that was fined for depositing inert waste at its landfill site without holding the appropriate licence.

The conservation of the Abrolhos Island button quail, an endemic species on North Island, was the aim of a joint project by DEC and Fisheries to remove Abrolhos tamar wallabies from North Island. The cumulative impacts of grazing by the introduced wallabies, which went from a population of five to 450 in 22 years, was thought to be responsible for a marked decline in button quail numbers in recent years.

August

After three years of collaboration, DEC's Good Neighbour Policy was released. The policy provided specific information about common cross-boundary issues as well as setting out principles for the establishment and maintenance of good relationships with neighbours.

A snapshot of the first year of the *Saving our Species* program highlighted some of the achievements of the \$15 million biodiversity conservation initiative. More than 8,000 invasive and pest animals were removed from parks, forests and reserves, 12,000 threatened plants were propagated for translocation, three Gilbert's potoroos were translocated to Bald Island near Albany, a 12-km fence was erected in Fitzgerald River National Park to help control the spread of dieback and 470,000ha have been mapped for dieback. As part of the biological survey and research aspect of the program, 200 flora plots were established and 20 new plant species identified in the Ravensthorpe Range plus 83 new plant species were described by DEC botanists in collaboration with local and interstate scientists.

Bilbies made the news when the threatened marsupial reclaimed part of its historic home range in the Goldfields. Forty bilbies bred in captivity were released on the former pastoral station Lorna Glen, 150km north-east of Wiluna, marking a milestone in the conversion of former pastoral leases to conservation estate.

Western swamp tortoises were also on the move. As part of efforts to prevent the extinction of the endangered reptiles, 25 juveniles from the Perth Zoo captive breeding program were released at Mogumber Nature Reserve in the Shire of Gingin.

An award for Excellence for Employers of Australian Apprentices highlighted the good work being done by DEC's Mentored Aboriginal Training and Employment Scheme (MATES) program. The program, which has won two other major awards, won the Federal Department of Education, Science and Training award in the category of Apprentices for the WA Southern Region.

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