



Conservation News

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MARCH 2006

Minister visits Midwest

ENVIRONMENT Minister Mark McGowan made a flying visit to national parks, nature reserves and a former pastoral station in the Midwest as part of his latest fact-finding mission this month.

The two-day tour saw him visit Nambung, Lesueur and Kalbarri national parks, punctuated by a one-night stay at Muggon Station, purchased by CALM to add to the reserve system, where he met local pastoralists.

Mr McGowan visited the site of Nambung National Park's new \$4.7 million interpretive

centre to be built at the Pinnacles, which receives 225,000 visitors a year, and was shown a woylie and quenda which had been trapped as part of a monitoring program following their reintroduction to the national park.

He launched CALM's latest book, *The Turquoise Coast*, a 128-page colour publication showcasing the attractions, wildlife and marine environment of the coast between Lancelin and Leeman. Written by Ann Storrie, Sue Morrison and Peter Morrison, it includes the Pinnacles in Nambung National

Park, wildflowers and caves, Jurien Bay Marine Park and 36 islands between Lancelin and the Beagle Islands north of Leeman.

Mr McGowan met executives of Tiwest Joint Venture and the Ardross Group, both of which have contributed to conservation projects in the area.

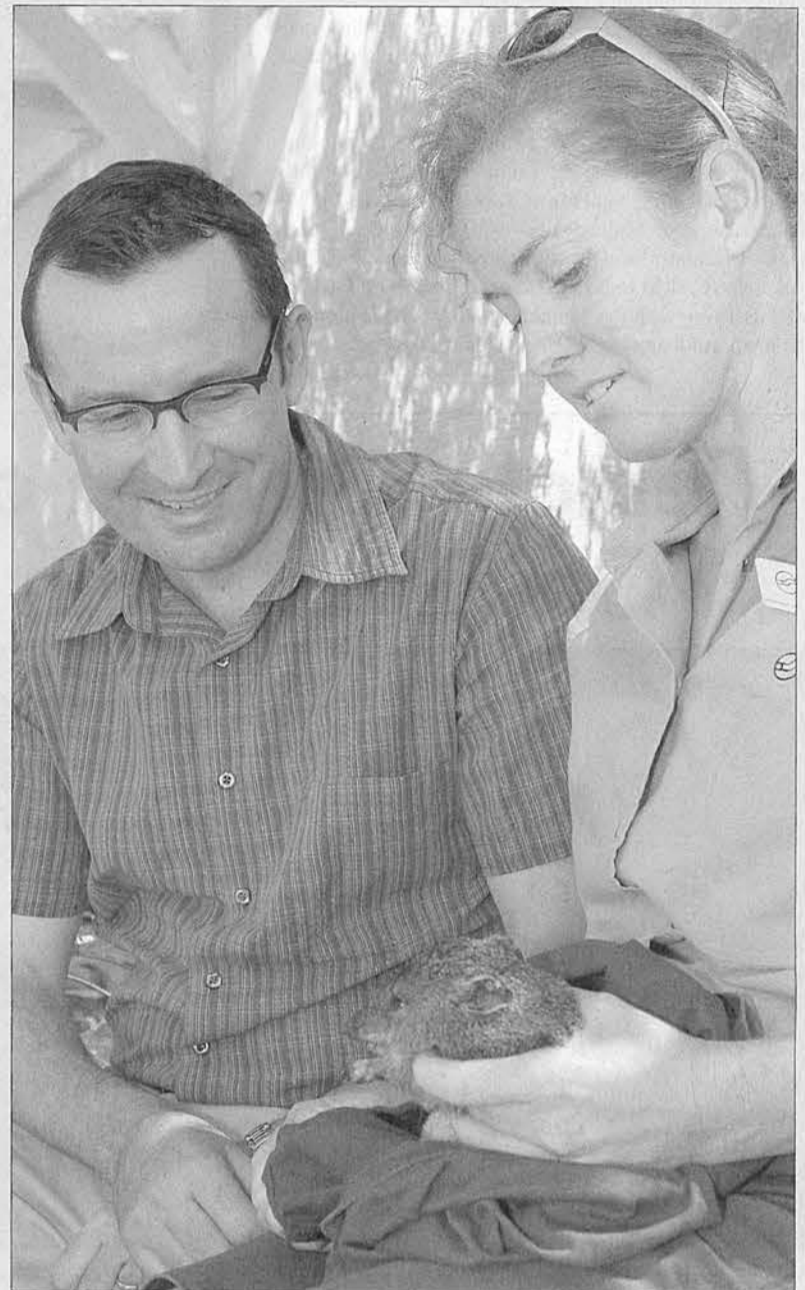
Tiwest recently made its second \$300,000 sponsorship of CALM's *Western Shield* project, which will support operations over more than 140,000 ha of land over five years.

"Tiwest has risen to the challenge of assisting CALM in controlling introduced animals and reintroducing our native fauna," the Minister said, adding the sponsorship had enabled the reintroduction of woylies, tamar wallabies and quenda into the Nambung area.

The Ardross Group has provided funding of \$200,000 to the Nature Conservation and National Parks fund.

"This is another partnership with the private sector aimed at enhancing the nature-based tourism potential of our national parks within this region," he said.

Mr McGowan also met Kalbarri CALM Bush Rangers and congratulated them for their outstanding success and efforts. He also opened new and improved facilities at Hawks Head and Ross Graham lookouts in Kalbarri National Park.



Minister McGowan looks at a quenda with CALM Conservation Officer Kathy Himbeck. Photo - Steve Buitenhuys



Pictured at *The Turquoise Coast* book launch were (from left) authors Sue Morrison, Ann Storrie and Peter Morrison with Moora District Manager, Keith Hockey, Nature Conservation Coordinator, Rebecca Carter, and Parks and Visitor Services Coordinator, George Waston. Photo - Carolyn Thomson-Dans, who edited the new book

Kalbarri flood views spectacular

VISITORS and locals enjoyed spectacular views from Kalbarri National Park's lookouts as the Murchison River - swollen by floodwaters from Cyclone Clare and Cyclone Emma 700 km away - raged through the gorges.

The rain fell around Meekatharra and other areas on the eastern side of the catchment 15 days before it hit the Kalbarri area and raced towards the ocean.

The waters rose and flooded the homestead of one of CALM's national park neighbours, the Murchison House Station 18 km east of the town, flooding it for the first time in more than a century.

CALM Senior Ranger, Mike Paxman, the Green Corps and townspeople helped the station owners get their furniture and other items out of the homestead before the waters hit.

Mike said it was a very busy two weeks. CALM workers took part in sandbagging the main area of Kalbarri and essential infrastructure such as the sewerage system



CALM staff sandbagged the homestead at Murchison House Station but the river flooded the dwelling. Photo - Mike Paxman

and the power supply.

In between, they met the Environment Minister, Mark McGowan, and worked with a Green Corps team in the national park.

Mike said popular walking trails around the Z Bend, the Loop and Hawks Head were closed for public safety, but the lookouts

remained open so that people could see the incredible force of nature as the river swept towards the coast.

"Unfortunately although there was a lot of water in the river, we didn't get any rain... We had all the effects of a flood without the rainfall," he said.

\$9 million fauna recovery project starts

By Tracy Peacock

A \$9 million, four-year research project examining fauna recovery at several sites across Western Australia is set to start.

The project - funded by CALM and the Canberra-based Invasive Animals Cooperative Research Centre - comes out of the *Western Shield* review which was publicly released last year.

Other contributors to the project include the Australian Wildlife Conservancy, Murdoch University, Curtin University and The University of Western Australia.

CALM Science Division's Fauna Conservation Program Leader, Keith Morris, said the project would look at why there was a lack of sustained fauna recovery at some of the *Western Shield* monitoring sites.

"When *Western Shield* started broadscale fox control in 1996 the fauna, particularly mammals, increased initially but by 2000-2001

there had been a significant decline in some species," he said.

"The woylie in particular was one species that increased to very high levels, but has now declined at most sites in the south-west.

"We haven't had the recovery in the fauna that we had hoped."

He said the research program would look at other issues that could be affecting native fauna recovery such as effectiveness of current fox baiting regimes, predation by feral cats and disease.

"We're linking with Murdoch University's veterinary school to survey the animals we capture for disease," Keith said.

However, he said the long-running wildlife recovery program had many significant success stories.

Tammar wallabies and rock-wallabies had increased significantly in the Wheatbelt, brushtail possums were abundant at some sites and chuditch had expanded their range.

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Working Together

A highlight in March was the opportunity to visit the Midwest Region with the Minister for the Environment, Mark McGowan, on his second two-day visit looking at CALM's activities since taking up the portfolio in February.

There has been considerable investment over recent years in park facilities and roads in Nambung, Lesueur and Kalbarri national parks, and it was great to see the quality of the work that has been completed, with more underway and planned. These works form part of a deliberate strategy to improve visitor facilities in a way that promotes safety, protects the environment and contributes to growing nature-based tourism in the Midwest.

It was also great to see that chuditches, woylies, quendas and tammar wallabies are again inhabiting parks in the region following their reintroduction as part of the *Western Shield* program.

The Murchison River floodwaters raging through the Kalbarri gorges were a spectacular sight. However the flooding of Murchison House Station homestead (and other pastoral homesteads upstream) and the threat to the town of Kalbarri brought out another aspect of what it means for CALM to be a good neighbour, with CALM staff assisting with the Murchison House evacuation and the town sandbagging. Well done to all the staff involved.

Keiran McNamara, Executive Director



Remote research at One Arm Point



Brian Carter and John Huisman examine images of Kimberley seaweeds. Photo - Kevin Kenneally

By Tracy Peacock

ONE Arm Point in the Kimberley may be a remote area north of Broome, but one CALM volunteer in the area is making a significant contribution to local marine plant research.

Retired pilot Brian Carter, who lives at One Arm Point on the Dampier Peninsula, has spent countless hours collecting about 1000 marine plant specimens that are being used by the WA Herbarium's research phycologist, John Huisman.

John, author of *Marine Plants of Australia*, is currently researching the seagrass and algal

flora of WA's north-west and hopes that his book on the subject will be published in 2007.

"Brian is providing fantastic specimens," he said. "In his collections I have already found several new species of seaweed that are yet to be described and named."

"He has also provided us with many species that haven't been found in Australia before."

John said till about five years ago, less than 25 marine plant species had been recorded in WA's north-west.

"Virtually nothing was known," he said.

It's this reason that John's so pleased with Brian's marine plant specimens.

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He's gone bats!

ONE of our staff has gone bats!

CALM Principal Research Scientist, Norm McKenzie, had just returned from two weeks in the Pilbara collecting bat data as part of the Pilbara Biological Survey.

Travelling between Ophthalmia Dam near Newman, Weeli Wolli Springs, Karijini National Park, Marble Bar, Cape Keraudren and other areas, Norm and volunteer Bob Bullen - an aerodynamic engineer with 25 years of experience in aircraft design - completed research on bat

By Sue McKenna

microhabitats, echolocation calls and hunting behaviour, including flight speeds.

"Near Marble Bar, we sat outside disused mine shafts with a radar gun - a similar model to the ones used by traffic police but with different calibrations - and clocked ghost bats as they flew out," Norm said.

They rediscovered the isolated population of 'chocolate bat' which was first found at Weeli Wolli Springs in the late 1970s, and measured its flight

characteristics and echolocation calls for comparison with the main population found across southern Australia.

"The chocolate bat hunts at speed in cluttered vegetation and close to obstructions such as cliffs. So we set our bat traps and mist nets accordingly," he said.

The Pilbara has 18 bat species, while the south-west has nine and the Kimberley 24.

Norm has been studying bats for 30 years and loves them - even when he's in the middle of a Pilbara heat-wave.

Wattle turn up next?



Research scientists Bruce Maslin (left) and Stephen van Leeuwen with one of the acacia samples at the WA Herbarium. Photo - Rhianna King

By Rhianna King

SCIENTISTS have been uncovering some interesting species as part of their research in the Pilbara, including seven acacias that had never been documented.

The species were recognised by CALM research scientists, Bruce Maslin and Stephen van Leeuwen, as part of their work on developing a field guide to the wattles of

the Pilbara. A number of the new species will be recommended for the declared rare and priority flora lists.

Bruce said that the Acacia research was being done in conjunction with the five-year Pilbara Biological Survey.

"The wattles were found across the Pilbara, which is very rich in flora biodiversity but poorly documented," he said.

"The work we're doing as part of the Pilbara Biological Survey is crucial to better understanding this biodiversity and the field guide will enable wattles to be quickly and easily identified, and will provide comprehensive information, drawings and photographs of each type. The information will also be presented in electronic format on the internet and on CD ROM."

Bruce said they had received valuable assistance from Pilbara pastoralists, mining company environmental staff and the local community.

"We have been assisted by so much local knowledge and WA Herbarium specimen records, and have received valuable information from the area's Indigenous people," he said.

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Bibbulmun 'end-to-enders' meet

A total of 135 walkers who have hiked the Bibbulmun Track from end-to-end met this month to share memories, swap hiking tips and relive an unforgettable experience.

Bibbulmun Track Foundation Event Manager, Steve Sertis, who has completed three end-to-ends, said completing the track was an "awesome" experience and it was great to get all the people together.

"We share a common bond and it was interesting to meet some of the people behind the musings found in the camp registers," he said.

It was a particularly memorable occasion for the walkers who completed the official group walks.

Walking the entire length of the track in one go is a challenge and generally takes between six and eight weeks to complete.

Many people achieve their end-to-end by walking the track over a number of years, starting out with day walks then spending their holidays walking different sections.

Jim Freeman, who has walked the track eight times, attended the event and wore his 1979 official t-shirt.

The 1979 end-to-end marked the official opening of the track and was part of WA's 150-year celebrations.



Four 1989 walkers were (left to right) Mavis Freeman, Max Walsh, Elaine Airey and Richard Pen-Dennis. Photo - Bibbulmun Track Foundation

Also attending the picnic was Greg Robertson, Site Manager at Boddington Gold Mine (BGM), the Foundation's new premier sponsor.

Bibbulmun Track Foundation's Executive Director, Linda Daniels, welcomed the new sponsor.

"Their sponsorship supports our ongoing maintenance program which involves more than 350 volunteers. All end-to-enders would appreciate the amount of work that it takes to maintain the Bibbulmun Track in world-class condition," she said.

For more information about the Bibbulmun Track phone (08) 9481 0551, email friends@bibbulmuntrack.org.au or visit the website www.bibbulmuntrack.org.au.

Purnululu future discussed

By Tracy Peacock

A new report focusing on the future of Purnululu National Park has been released.

The Steps for Sustainable Tourism report – with 18 action plans for the area – has been developed by CALM on behalf of the Federal Government's Department of the Environment and Heritage (DEH).

Released in the form of a specially-designed CD featuring artwork by artist Bessie Daylight, it has been distributed to key stakeholders including the WA Indigenous Tourism Operators Committee.

CALM Parks and Visitor Services Division Tourism and Marketing Coordinator, Rod Quartermain, said five workshops with regional tourism and Aboriginal stakeholders were conducted between July 2004 and February 2005 as part of the project.

"It was a year-long program bringing Aboriginal people connected with the joint management of Purnululu National Park, commercial tour operators, tourism stake-

holders and CALM together to form partnerships and strategies for the cultural and tourism aspects of the park," he said.

"It was enlightening and encouraging to see people who had lived side-by-side for years come together to discuss the future of the park. It developed trust and familiarity."

Rod said the report was only the beginning of tourism development at the park and work had already started on implementing some of the 18 action plans.

The action plans include the development of a Welcome to Country, longer backpack walks, tour operator training, short guided walks and an upmarket safari camp.

"Some of these are already being implemented such as the development of a magpaper and the Welcome to Country. Initial investigations into the development of an upmarket safari camp are also underway," Rod said.

Copies of the report contained on the CD are available free of charge from Park Policy and Services. Contact Rod Quartermain on 9334 0562 or rodq@calm.wa.gov.au



Fire crews tackle lightning strikes

CALM fire crews and officers from Mundaring (pictured) conducted a hand-tool attack on a lightning-caused fire in the steep hills of Avon Valley National Park in late February. The area contained unburned fuel and the use of heavy machinery was prevented because of the terrain.

Fire crews and local bush brigades were busy late last month when lightning strikes caused a chain of some 54 wildfires over

two days. The fires extended from Kalbarri to West Cape Howe, near Albany, with many on CALM-managed lands.

CALM Fire Management Services Manager Rick Sneeuwjagt described the chain of bushfires as "quite unusual but not rare".

"However, it was extremely testing and we handled it very, very well because of the outstanding efforts of the ground crews and water bombers," he said.

"Several of the lightning-caused fires were able to be controlled easily because they burnt into or within relatively lighter fuels resulting from recent prescribed burnt areas.

"As these fires were unlikely to escalate, fire suppression resources were redirected to other fires which had significant potential to rapidly burn out of control and threaten community assets and natural values."

Volunteers identify orchid species

VOLUNTEERS have helped CALM identify a healthy population of a rare and endangered species of orchid within Kooljerrenup Nature Reserve, near Pinjarra.

A survey of the nature reserve in October by eight CALM staff and volunteers located and recorded GPS coordinates for 246 plants of the grand spider orchid (*Caladenia huegelii*), which is now the third largest known population.

CALM Nature Conservation Officer, Nicole Willers, said the Kooljerrenup Nature Reserve, on the east side of the Harvey Estuary, was of particular interest to conservation staff since 1995 when a CALM scientist discovered a single flowering orchid.

"This was important as it provides a link between the two areas where the orchid was previously known to exist, in the Perth metropolitan area, mainly around Southern River and Huntingdale, and down to Mandella, and further south in Busselton," she said.

"With urban expansion impacting heavily on the grand spider orchid habitat, CALM has made a significant commitment to conduct extensive surveys since 2004.

"CALM, with the help of the Botanic Gardens and Parks Authority and many volunteers, visited known populations and other areas identified as having prospective habitat to



Pictured (left to right) were volunteers John and Judy Blyth from Dalglish (John was a former CALM staff member) and Jack Kelly from Secret Harbour; Petra Kohn (CALM Mandurah), Nicole Willers (CALM Swan Region), volunteer Peg Foreman from Halls Head, Myles Mulvay (CALM Mandurah) and Gillian Stack (CALM Woodvale).

carry out surveys, which were coined the Huegelii Hunt."

Success was not immediate as the 2004 survey of Kooljerrenup Nature Reserve involving 32 search hours only discovered one flowering plant, located about 500 m from the plant found in 1995.

This year, CALM volunteers from Mandurah and Perth joined CALM staff from Swan Region, Woodvale and Mandurah to search more of the nature reserve, in the second instalment of the Huegelii Hunt.

"There was great excitement among the survey team as it became clear that the orchid was healthy and abundant in the search area with many standing 70 cm high and some 'double-headers' (two flowers per stem)," Nicole said.

"The contribution of volunteers to the conservation of this orchid species has been invaluable."

Further surveys are planned for 2006 and anyone interested in taking park can call Nicole Willers on 9368 4399.

\$9 million fauna recovery project starts

From page 1

Three external scientists – Dr David Choquenot from Landcare, New Zealand; Dr Peter Jarman, University of New England, New South Wales; and Dr Andrew Burbidge, formerly of CALM – have started to review the project's proposals.

"We've just had our first meeting with them and we'll meet again in November to see how we've progressed over the first six months.

"We will meet with the reviewers annually," Keith said.

The project will focus on four areas:

- Rangelands – headed by Dave Algar;
- Lake Magenta Nature Reserve – headed by Keith Morris;
- Dryandra woodland – headed by Nicky Marlow; and
- Northern jarrah forest – headed by Paul de Tores.

"The different sites will use simi-

lar methodologies where possible and collectively aim to find the reasons for the lack of fauna recovery at a range of sites," he said.

Keith said trap grids and sand plots had been set up in some of the research areas last month as part of the initial stages of the project.

The field work will start over the next few months with staff involved from CALM's Woodvale and Dwellingup research centres, plus some Wheatbelt regional staff.

Still looking for seal killer

By Tracy Peacock

CALM is calling on the public to come forward if they have information about the recent death in Albany of a New Zealand fur seal known as Sammy.

The seal, well-known to locals and visitors to Albany for the past 10 years, was found at Emu Point channel on February 11.

CALM Albany District Wildlife Officer, Jonathan Pridham, said inquiries so far had failed to identify anyone responsible.

"The attack happened sometime between late evening on Friday February 10 and early morning Saturday February 11," he said.

"CALM is working with local police and a number of people have been interviewed in relation to the incident.

"We arranged for the seal's ashes to be returned to Albany and a memorial service was conducted at Emu Point on March 4.

"It was attended by about 200 people and the ashes were spread at Emu Point where Sammy visited."

Wattle turn up next?

From page 2

"We have also received considerable support from Pilbara Iron, BHP Billiton Iron Ore and their environmental consultants. The project is generously supported by Robe River Mining under the auspices of the environmental offsets package for the West Angelas Coondewanna West Rail project."

The most spectacular of the new species, *Acacia leeuweniana*, was named after Stephen, who has worked on Pilbara plants for more than 20 years.

"This long-lived plant grows up to 14 m tall and is characterised by its brilliant orange-red Minni Ritchi bark, which peels in curly shavings," he said.

"It has been found growing on only two large granite outcrops, which is an extremely uncommon habitat in the Pilbara."

Details on the Pilbara wattle project are available on CALM's WorldWideWattle website at www.worldwidewattle.com/info-gallery/misc/pilbara.php and FloraBase website at www.naturebase.net/florabase.

Remote research at One Arm Point

From page 2

"Brian's been coming up with some specimens that we haven't seen plus he's provided us with some marvelous photography."

CALM Landscape Expeditions Coordinator, Kevin Kenneally, also praised Brian's contribution to CALM as a volunteer over more than 20 years, including his work on the award winning book, *Broome and Beyond*.

"He's put in an amazing amount of time," Kevin said of Brian's current project to collect marine plant specimens.

"Brian's work is a wonderful example of community participation in conservation where the community is empowered to undertake a project that is making a significant contribution to CALM's knowledge of the marine flora of the Kimberley.

"The cost for us to do the collecting that Brian has been doing at One Arm Point would be enormous.

"At the same time, Brian gets a big buzz out of knowing he's making a contribution to marine conservation and that it is pioneering stuff that he is doing."



Former CALM staff member and event narrator Marissa Maher in front of the spectacular canvas, which was unveiled as part of the Welcome to Country celebrations. Photo – Rhianna King

Perth International Festival gets a Welcome to Country

By Rhianna King

“NGULLAK nyinniny kooralong kooranullak boitj nidja noongar boodjar” or, in English, “From the beginning of time to the end, this in Nyoongar Country” was a central theme of last month’s Welcome to Country celebration.

The event was presented by Yirra Yaakin, one of Australia’s leading theatre companies, for the opening of the Perth International Arts Festival.

It began with a walk from Heirisson Island to reignite the flame of Nyoongar culture and lay a strong foundation and safe passage for the whole community. There were cultural songs and dances, a traditional calling, a ceremonial burning of a balga and acacia tree and the unveiling of a painting three years in the making.

It also featured some familiar faces to CALM.

Marissa Maher, CALM’s former Aboriginal Heritage Officer, narrated the evening performance, while Aboriginal Heritage Officer, Delvene Cornwall, and Matilda Bay Officer, Wayne Dekker, danced. The Indigenous Heritage Unit’s Cultural and Community Coordinator, Koodah Cornwall, and Business Development Officer, Tania Donovan, helped with the walk and conducted bush tucker tours.

Their involvement was based on a partnership between CALM’s Indigenous Heritage Unit and Yirra Yaakin, and the common commitment to celebrate the Nyoongar culture and share it with others.

“People often look to the north for ‘traditional’ Aboriginal cultures not realising that there is a very proud culture in the south-west in the Nyoongars,” Marissa said.

The painting, a massive canvas by six Nyoongar artists, illustrates the Nyoongar nation’s relationship to Country and the strength of the living Nyoongar culture.

Conservation briefs

Stranded dolphins a rare event

The stranding of 42 striped dolphins between Black Point and the mouth of the Warren River in D’Entrecasteaux National Park earlier this month was a rare event, according to Acting Donnelly District Manager, David Meehan.

“In my 16 years in the area I haven’t experienced a stranding of this number,” he said.

Unfortunately, all of the dolphins died, despite the best efforts of about 22 CALM staff and volunteers.

The dolphins beached themselves along 25 km of remote and rugged coastline.

Quad bikes were used to get to some of the animals as four-wheel drives could not access the area. A spotter plane was used to see if there were any further strandings to the south, and found that there were.

Tissue samples and measurements will be analysed by scientists to help build on knowledge and understanding of the animals.

A winning environment

CALM’s Swan Region Parks and Visitor Services Leader, Stev Slavin, who judged the WA Young Achiever Awards’ Environment Section recently, was impressed by the achievements of award nominees.

The process of assessing and reducing the excellent applications down to three and then finally the winner, was difficult, Stev said.

Twenty-three applications were assessed for the Environment category from people under 27, based on their achievements in leadership, vision, commitment, pursuit of excellence and meaningful contributions.

The winner was Sally Thomson, a Natural Resource Management Officer for the shires of Wagin and Woodanilling. She has created an integrated community approach to salinity and landcare issues, revitalised interest in catchment protection and has attracted more than \$1 million in funding for on-ground landcare work in the Wheatbelt.

Staff changes . . . Staff changes . . .

Contract

Peta Wait, Project Officer, Perth Hills District, Mundaring; Tiffany Fowler, Field Officer, Collie Work Centre, Collie; Monica Batista, Project Officer, Woodvale Research Centre, Woodvale; Sarah de Bueger, Project Officer, WA Herbarium, Kensington; Roz Hart, Education Officer, WA Herbarium, Kensington; Karen Rusten, Technical Officer (Cane Toad), Kimberley Region, Kununurra; Nicholas George, Technical Officer, Natural Resources Branch, Kensington; Phillip Burton, Landscape Draftsperson, Parks and Visitor Services, Kensington; Joanna Moore, Project Officer, Nature Conservation Division, Crawley.

Permanent

Mia Morley, Ecologist, Woodvale Research Centre, Woodvale; Linda Reinhold, Ecologist, Shark Bay District, Denham; Clifford Lloyd, Natural Resources Coordinator, Natural Resources Branch, Kensington; Wynne Davey, Information Officer, Geraldton District; Adam Peck, Technical Officer, Natural Resources Branch, Kensington.

Resignations

Matthew Byrne, Assistant Operations Officer, Perth Hills District, Mundaring; Maxwell Speer, Technical Officer (Rigging), Radio Communications Section,

Kensington; Max Haste, District Manager, West Kimberley District, Broome; Marny Bendotti, Workforce Services Officer, People Services Branch, Kensington; Adam Peck, Technical Officer, Natural Resources Branch, Kensington.

Temporary deployment

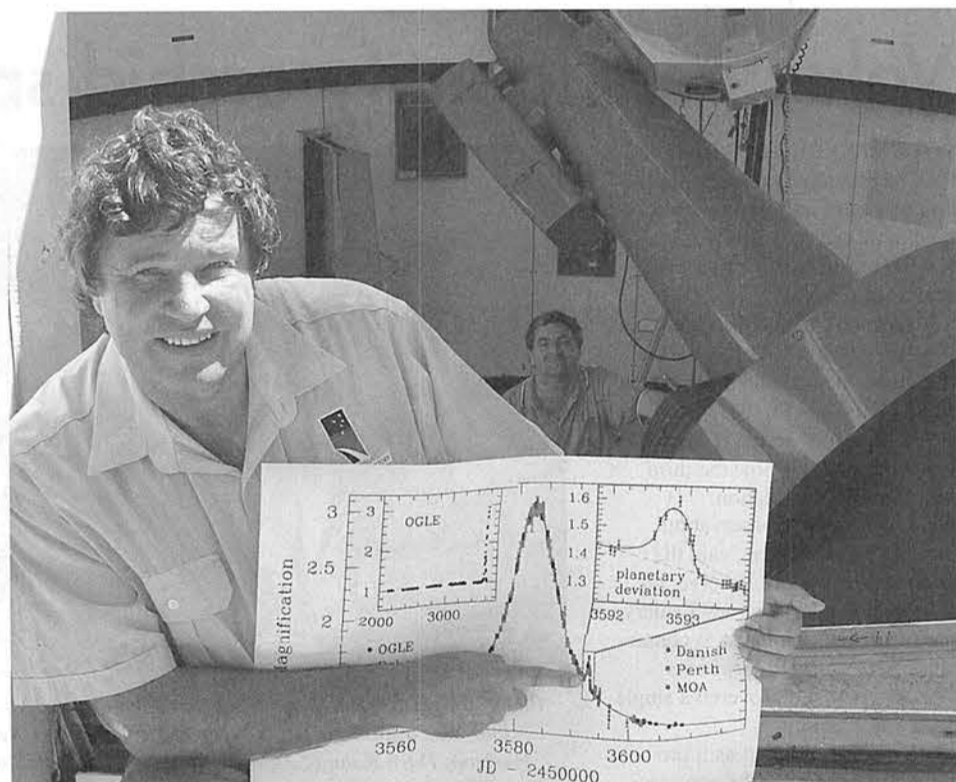
Grant Eikelboom, Field Officer, Perth Hills District, Mundaring to Fire Management Services, Kensington; Brad Rushforth, Operations Officer, Kununurra District, Kununurra to Midwest Region, Jurien Bay; Michelle Rouffignac, Project Officer, Perth Zoo to Parks and Visitor Services, Kensington; Kellie Agar, Program Coordinator, Swan Region to Nature Conservation Branch, Kensington; Marie Strelein, Conservation Officer (Flora), Narrogin District, Narrogin; Vanessa Clarke, Conservation Officer (Flora), Kalgoorlie to Kensington; Matt Swan, Wildlife Officer, Swan Coastal District to Nature Protection Branch, Kensington.

Contract ceased

Craig Kitson, Ranger, Exmouth District, Exmouth; Janine Tasaka-Owens, Project Officer, Park Policy and Tourism, Kensington; Jordan Reid, Technical Officer, CALM Science, Kensington.

Leave without pay

Kylie North, Programs Officer, Perth Hills District, Mundaring.



Astronomers Ralph Martin (front) and Dr Andrew Williams (back), with a light curve graph associated with the planet’s discovery. Photo courtesy Echo Newspaper.

Local astronomers help find new planet

By Jean Stewart

Astronomers at Perth Observatory played a crucial part in the discovery of a new planet orbiting a distant star.

Astronomers, Dr Andrew Williams and Ralph Martin, are involved in PLANET (Probing Lensing Anomalies NETWORK), which is one of three international observing campaigns that worked collaboratively to make the discovery.

The three campaigns involved 73 collaborators affiliated with 32 institutions across 12 countries – France, United Kingdom, Poland, Denmark, Germany, Austria, Chile, Australia, New Zealand, United States of America, South Africa and Japan.

Andrew said the Perth Observatory played an essential role in the collaboration because of its position on the globe.

“Detecting short-lived signals like the ones from this planet required observations every hour or so, 24 hours a day, so observations from Perth filled the large time-zone gap in the Southern Hemisphere between Chile and South Africa,” he said.

Perth Observatory took two-thirds of all the images during the course of the ‘planetary anomaly’, lasting about a day. Without the data from Perth, the mass, orbit, and even existence of the planet would be in doubt.

Based on the brightness of the parent star and the orbital distance, astronomers calculate that the planet has a surface temperature of only about 50°Kelvin, or 220°C below zero.

Even so, Ralph said that the planet is more Earth-like than any other planet discovered so far.

“It is about five-times as massive as the Earth with an orbital radius about three-times the Earth-Sun distance in our solar system, and orbits its parent star every 10 years,” he said.

“Due to its low mass and low temperature it must be solid, an icy or rocky planet similar to Pluto in our solar system, rather than gaseous like Jupiter, Saturn, Uranus and Neptune.”

The discovery is expected to encourage more microlensing planet searches using current and additional facilities from the ground – or possibly with a space-based campaign in the near future.