Conservation N



MARCH 2005

CALM celebrates 20-year anniversary

THIS month marks the 20-year milestone since the Conservation and Land Management Act 1984 came into effect.

The Act gave effect to the merger of the Wildlife section of the Department of Fisheries and Wildlife, the National Parks Authority and the Forests Department to create CALM.

This brought together a staff of just over 1400 on 22 March 1985 - more than half of those outside the metropolitan area based in the south-west forests.

CALM's Executive Director Keiran McNamara said there had been significant advances for conservation and forest management in Western Australia since 1985

"Marine parks, for example, were still a pretty new concept worldwide in the 1980s, and there were none in WA," he said.

"Today we have eight marine parks including the internationally renowned Ningaloo Reef and the World Heritage listed Shark Bay Marine Park.

"The number of national parks in WA has nearly doubled, from 52 in March 1985 to 98

"Significantly, the number of visitors to the lands and waters managed by CALM has risen from 4.5 million in 1989-1990, to 10.9 million for the last financial year.

"Many of these visitors have been attracted by innovative facilities, from the outstanding Tree Top Walk, Bibbulmun Track and Munda Biddi Trail to the many camp sites, lookouts, picnic areas, and walk trails.

"The past 20 years has also seen the introduction of Western Shield, recently assessed by an independent review panel as 'a worldclass predator threat abatement program', and systematic biological surveys of about 20 per cent of the State.

"The number of specimens in the WA Herbarium has more than doubled from 300,000 in 1985, and CALM scientists have published an average of one article every

week in peer-reviewed journals.

"Public consultation and involvement has grown exponentially: from two community advisory committees in 1985-86 to 20 today, and an annual contribution of 40,000 hours in 1990-91 by CALM volunteers, rising to 355,000 hours in 2003-04.

"These are just some of the highlights, but there's still much to be achieved.

"Weeds, feral animals, the spread of dieback and rising salinity levels continue to be major threats to WA's biodiversity, and there are new threats such as the advance of the cane toad and climate change.

"The Western Shield review panel acknowledged the importance of 'dedicated and competent staff'.

"Of those who reported to work for the new CALM in 1985, about 300 are still working for the Department. This represents a wealth of corporate knowledge and commitment, a value I find in staff of all ages and backgrounds.

"CALM has also been able to markedly improve the spread of staff and expertise beyond the south-west forest regions into the remainder of the State.

"At the start of 2005, 35 per cent of nonmetropolitan staff were working in the southwest and staff numbers in the Kimberley, for example, had gone from three in 1985 to 36 in 2005. Other big changes have occurred in the Pilbara (eight to 45), Midwest (six to 79), Wheatbelt (17 to 59) and South Coast

"CALM's 20th anniversary is an excellent opportunity to review what's been done, and to set goals for the coming years."

A copy of the front page of the first CALM News, as it was then, is included as a supplement to this issue of Conservation News, together with a sample of stories run in March 1985. These supplements will continue each month during the anniversary year.

Luck's in for Lucky

by Tracy Peacock

MEET Lucky - not your ordinary bobtail lizard.

She's well-fed, well-travelled and well-known to many CALM staff.

CALM Wildlife Officer Pauline Southgate jokes that Lucky is one of the most travelled reptiles in Perth.

The Department's Nature Protection Branch, Kensington, has been Lucky's home for the past four

She arrived after a bungled smuggling attempt which saw her travel to Germany and back - twice - in a post-pak, over a period of three

"The box was finally opened at a police station in Perth," Pauline said.

"She was dehydrated, emaciated and her arms and legs were taped to her body so she couldn't move, therefore preventing her being detected through noise.

"It just shows the cruel lengths people will go to for monetary reward.

"But, she's well and truly back in prime condition!"

Pauline said they could not put Lucky back into the bush because they were unsure of her history and background.

"She may stay with us for the rest of her life," she said.

And that could be a while. Pauline said bobtails are known to live for up to 30 years in captivity.

Pauline is CALM's only female wildlife officer and is one of five outstanding CALM women featured in stories on page five to mark International Women's Day, which fell on March 8.



Wildlife Officer Pauline Southgate with Lucky. Photo - Simon Westlake

Koolyanobbing flora project

by Tracy Peacock

A small leafless shrub with scented deep pink flowers - found only on the cliffs and hills of the Windarling Range, north of Koolyanobbing is the focus of a major CALM flora conservation project.

The five-year project centres on the critically endangered *Tetratheca* paynterae found at Portman Limited's Windarling iron ore mine and three

aphylla found at the Helena and Aurora Ranges.

CALM Science Division's Flora Conservation Program Scientist, Colin scientists at the Botanic Gardens and Parks Authority (BGPA)

ronmental and other causes of rarity for the ironstone tetrathecas, and the impact that mining is having on the *Tetratheca paynterae* population," he

Mining had removed 20 per cent of plants from the only known popu-

lation of *Tetratheca paynterae*.

Seeds from the destroyed plants had been collected by Portman Limited

why each ironstone range has a specific *Tetratheca* growing there and to assess the impact of mining on *Tetratheca paynterae*," Colin said.

Twenty years of outstanding service

CALM has a wealth of dedicated staff, one of whom is Peter White.

In a 20-year career with CALM, as well as 10 years with the Forests Department, Peter has worked in Broome and Narrogin and still loves the variety of work.

He has been involved in nursery management, been a coordinator of the Oil Mallee Program and has developed expertise in farmland revegetation works. Associated with this work, his interests extend to plant health issues in the surrounding woodlands and revegetated areas.

As the Wheatbelt Region's Rural Advisory Officer, part of Peter's work has been to respond to calls from everyone from farmers to botanists, nursery owners, Landcare coordinators and Natural Resource Management people to help diagnose problems.

"They get in touch to say: Come and look at these trees because they're dying. They never call to say: Come and look at these beautiful trees!" Peter said. "I seem to spend a lot of time doing 'post mortems' on trees.

"However, I've been fortunate to

be in a career that I love. I often feel I've had a vocation rather than a job and I've been able to indulge my interests in the outdoors, wildflowers and nature conservation to purposeful ends,"

"One of the other great attractions of working for the Department has been the variety of challenging tasks, with the need to find solutions and adapt to new situations."

For more information, visit http://www.calm.wa.gov.au/projects/ habitat/index.html.

This is the first of a series of stories to be run during CALM's 20th anniversary about people who have been with CALM since it was established.



Peter White at work. Photo - CALM

Working Together

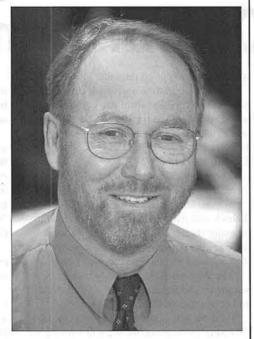
This edition of *Conservation News* marks the 20th anniversary, on 22 March 2005, of the establishment of the Department of Conservation and Land Management. The lead article on the front page gives a snapshot of just some of the achievements and changes over that time, while the extracts from the March 1985 *CALM News* in the later pages remind us of some of the people who have made significant contributions to the Department's work.

It remains my intention that we will celebrate our 20th anniversary at an event that will then lead into a planning day for review and updating of CALM's 2002-2005 Corporate Plan. However I have decided to postpone that event for a little while, to allow some more time for preparation now that the State election is over.

Dr Judy Edwards MLA has been reappointed as Minister for the Environment, with the additional portfolio of Science. The Government has a range of policy commitments in CALM's areas of operation, and we look forward to working with Dr Edwards again in helping to deliver on those commitments, especially in marine conservation and the protection of biodiversity. The Department's strong science base also presents the opportunity to forge stronger links with the Office of Science and Innovation under the revised portfolio arrangements.

There is no doubt that the period ahead will again be demanding, however I am sure we can look forward with confidence, building on the achievements of the past 20 years, the dedication and skills of our staff, and the many partnerships we have with the community and other organisations.

Keiran McNamara, Executive Director



Fire logistics praised

By Rhianna Mooney

ALAN Walker, CALM's Director of Regional Services, spoke at a lunchtime seminar at Kensington last month about the Perth hills fire and the logistical operations that were carried out during the fire, as well as the human aspects of the fire suppression.

Alan praised the work of operations, planning, logistics and support staff from CALM and the Forest Products Commission who, in many cases, battled with strong emotional reactions as well as combating the fire. A total of 670 CALM staff and 63 FPC staff contributed to the fire suppression effort.

"Crews were exposed to real danger and were deployed on the fire for very long periods so some of the responses that were experienced were not typical of other fire situations," Alan said.

"The whole situation highlighted the dedication and spirit of CALM staff, who all pulled together in what was the largest fire in the South West since the Dwellingup fire in 1961"

Videos of Alan's presentation have been distributed to all Regional and District Managers. If you would like to obtain any additional copies, please contact Mitzi Vance, Media Liaison Officer, on 9389 8644 or by email (mitziv@calm.wa.gov.au).

Conservation News Month 2002

Published by Department of Conservation and Land Management Strategic Development and Corporate Affairs, Cygnet Hall, cnr Mounts Bay Road and Hackett Drive, CRAWLEY, Western Australia 6009

Managing Editor: Sue McKenna

Journalist: Tracy Peacock

Contributing Editor: Rhianna Mooney

Design and Production: Natalie Jolakoski

Telephone: (08) 9389 8644
Facsimile: (08) 9389 8296
Printed on 100% recycled paper

Local knowledge adds to perspective

AS he plans his next trip to the Pilbara, Senior Research Scientist, Allan Burbidge, looks forward to getting out in the field with added perspective from some friendly locals.

Allan and his four teams of biologists surveyed vertebrates as part of the Pilbara Biological Survey in October last year. They caught more than 100 reptile species, more than a dozen mammal species and recorded more than 100 species of birds at the 150 quadrats that were sampled.

Survey areas are spread across the Pilbara, but one of the survey areas is centred on Millstream-Chichester National Park. For part of the work in this area, the team was joined by National Park Ranger, Kingsley Woodley. Regional Ecologist, Peter Kendrick, was also a leader of one of the four survey teams.

Peter is a recognised authority on the Pilbara fauna, and other regional staff, particularly Aboriginal staff who grew up in the area, have their own unique understanding of the landscape and the animals that live there.

"Working with Peter, Kingsley and other Pilbara staff gave us a great opportunity to learn from their local experiences," Allan said.

"This broadened perspective will be important when it comes to interpreting our results."

Pilbara Regional Leader Parks and Visitor Services, Dave Whitelaw, said he recognised the mutual benefits resulting from the regional staff being involved in the survey

"Staff are given the opportunity to be involved wherever possible and I think it's very positive for them to be involved in the surveys," Dave said.



CALM staff member Tristan Farmer was pictured carrying explosives and equipment to blast small craters in the Pilbara's rocky ground. Pit traps to catch small reptiles and mammals are installed in these craters. Photo – Jim Rolfe

Second round of Pilbara Biological Survey

By Sue McKenna and Rhianna Mooney

CALM's Pilbara Biological Survey teams are preparing for this year's field sampling trips in the 180,000 square kilometre North West WA region.

The five-year survey, which began in late 2002, is taking a biological snapshot of plant and animal life on the ground, in the air and in the water.

Scientists and technical officers from CALM's flora, aquatic and terrestrial teams are organising transport, camping and catering logistics for the second of four field trips to the Pilbara in April and May.

The survey is believed to be one of the largest of its kind in the world and will provide extensive data on aquatic life, flora, mammals, reptiles and birds

Staff have already spent several months analysing data, writing scientific papers, cataloguing specimens and resolving taxanomic uncertainties arising from last year's field trips.

"The survey is progressing well and running on time," CALM zoologist and survey leader, Norm McKenzie, said.

Two sub-projects about bats (a survey, and the development of an ultrasound call dictionary) and birds (a review of pre-existing bird records) are also running smoothly.



Staff members (from left) Patrick Cullen, Tristan Farmer, Dan Kamien and Roger Whitelaw use their weight to assist a mobile drilling rig to drill holes for vertebrate pit traps in the hard Pilbara landscape. The traps catch small ground dwelling creatures such as dunnarts, skinks, geckos and small dragons. Photo – Jim Rolfe

Terrestrial invertebrates of the Pilbara put under the microscope

CALM Research Scientists, Nadine Guthrie and Brad Durrant, and their colleagues and collaborators are still sorting through the specimens collected as part of the Pilbara Biological Survey in October last year.

Nadine said she expected that between 1200 and 1500 species would be collected from the 151 sites, across varying landforms. She estimates that as many as 13,000 records would result.

The Woodvale Research Centre team has spent many hours looking down a microscope, separating the specimens collected into families.

"We identify the specimens to species level and then send them to our colleagues elsewhere for verification," Nadine said.

"Spiders go the Western Australian Museum where we work closely with museum staff, but other groups go to specialists in places like the Australian National Insect Collection in Canberra."

Nadine said they had already collected at least 50 to 60 wasp species and different species of beetles, spiders and scorpions. So, the task ahead of identifying and sorting was a big one.

"The Pilbara is definitely rich in terrestrial invertebrates, but just how rich, is – at the moment – anyone's guess, but we're finding lots of things that are new or previously unknown, which is exciting," she said.

Twenty years ago this month. . . March 1985

CALM News

ifficial newspaper of the Department of Conservation and Land Management

Vol 1 No 1 March 1985



statement on the policies and the future generations. future of the new Department of Conservation and Land Management.

inappropriate because the Minister, terests of the public. on behalf of the Government, determines Department policies.

policy development by the three management. Policy Councils established under the of the Department.

I cannot pre-empt the process of the public in the future. policy development, but I can outline principles.

The legislation and the ad- ed for future generations. ministrative structure of the Department indicates that our role is to be short of resources.

It is tempting, in this first edition manage the land vested in the of CALM News to write a glowing Department for the public and for

This means that we must upgrade made available to us. our efforts in the area of public par-However, I believe this would be and is perceived to be, in the best in- by the Department.

The Minister will be assisted in often conflicting views on land our land areas, then we will be in a senior staff, although I intend to use

Act, the Senior Policy Group of the day may be incompatible with the management. Department and, I hope, all members need to ensure that our land management practices maintain options for in later articles in this paper.

Although it is a difficult task, I am some broad principles which the confident we have the technical Government has already established knowledge and managerial skills to technically competent and dedicated members do throughout the State, be and indicate how I believe the reconcile any conflicts over land Department should respond to these management, while at the same time for. ensuring that public land is maintain-

This means that our operations must be efficient, so that we get max- answers. imum return for the money that is

ticipation so that our management is, to earn money which can be retained

Clearly, this is a difficult task, trepreneurial approach to obtaining team approach. because the 'public' has a variety of finances, compatible with protecting

This paper is The demands that society make to- resources we need for better land ment well informed of our activities.

The most important resource we have is our staff.

staff that any Department could wish one of the mechanisms by which all

tial which is provided by our staff Department. Obviously, we are always going to resource can only be realised if we work together.

No single person has all the

The prime purpose of CALM News is to provide a means by which However, we do have the capacity people can communicate with each

other. This, I believe, is the most impor-I believe that if we adopt an en- tant initial step towards developing a

This paper is not a journal for much better position to provide the it to keep the members of the Depart-

I hope that every member of the I would like to develop this theme Department also sees this paper as a way to put their views forward.

CALM News will, I hope, in addition to providing information about I believe we have the most all the various jobs that staff members of the staff can contribute I believe, however, that the poten- to developing policies for the

SYD SHEA **Executive Director**

CONSERVATION Three research pro- dance by the early ex-We are all familiar with grammes carried out at the plorers and scientific the variety of reasons put forward to explain the Wildlife Centre have expeditions were not decline of the mammals - helped us come to grips found.

Leon Griffiths and the Minister for Conservation and Land Management,

0 bonus for A Cartographic Draftsman with the,

Forests Department Mapping Branch, Leon Griffiths, has won \$200 for designing CALM'S new logo.

Management, Mr Davies, format. presented Leon with the cheque recently.

tion of the Department of for final selection. Fisheries and Wildlife and Forest Department.

torial logo, the over- the inland plateau.

The Minister for Con- whelming majority servation and Land favoured a symbolic

The committee selected three designs for further Five designs for the new development and these logo were considered by a were submitted to the committee comprising Na- Premier, Mr Burke, and tional Parks, Wildlife sec- the Minister, Mr Davies

Leon says the logo's the Design and Informa- shape represents the earth; tion branches of the the colours indicate the sky, water, soil and While some of the com- plants; and the internal mittee and those people shapes illustrate the sea, consulted favoured a pic- plains, breakaways and

A \$7,000 grant has been made available to the new Department to assist with the introduction of an innovative employee fitness and recreation programme.

Funded by the Commonwealth Department of Sport Recreation and Tourism, the money will be spent on a 'needs' survey and the organization of a pilot health and fitness

The establishment work and resulting reports will be carried out by advanced students from the Department of Human Movement and Recreation Studies (UWA) under the guidance of Glen Watkins.

It is expected that the programme will co-ordinate and expand appropriate voluntary activities so that they meet the specific requirements of employees in differing work nvironments.

The Department's efforts may become the model for similar organizations

PLAN IN DESERT

by Andrew A. Burbidge, Principal Research Officer

Of all the animal groups occurring in Australia, mammals have suffered most since the arrival of Europeans.

clearing, foxes and cats, grazing by domestic stock portant, and whether the Plain last year. decline can be halted or revised.

is arid sandy or stony Western Australian deserts declined or become extinct desert dominated by spini- and resulted in a good un- have adult body weights fex (Triodia and Plec- derstanding of the current between 50g and 5kg.

This is the area least affected by European man been recorded in abunand his animal's and weeds - it has never been cleared or grazed by stock, nor have rabbits had any impact.

Remarkably, though, the deserts have suffered a massive decline in their once rich mammal fauna, with many species either locally or completely extinct.

In this simple environment, where few changes have taken place, a study of the causes of decline should be easier than in other parts of the State and, hopefully, it should the decline.

with the problem.

These surveys were the first detailed examination these analyses is that all About one-third of WA of the vertebrate fauna of species which have

The second study, again The first was a series of by Norm McKenzie and and rabbits, fire and so on biological surveys of the myself, has analysed post-- but there are few studies deserts directed by Norm European changes in the available showing which McKenzie and myself be- status and distribution of factor or combination of tween 1975 and 1979, and the W.A. mammal fauna factors has been most im- continued on the Nullabor to seek patterns that might reveal causes of decline.

One interesting result of

trachne) grasslands. status of desert mammals. Within this 'critical Many species which had weight range' desert mam-



be easier to halt or reverse The numbat — hoping to grow with the new Department.

Iwenty years ago this month. . . March 1985





Members of the Banksia survey - (from left) Ron Sokolowski, Greg Keighery, Judith Brown and Jeni Alford — were particularly interested in the pale yellow colour of this Banksia menziesii flower growing at Woodvale.

Banksia in the spotlight

A National Survey of banksias has been launched in Perth.

the assistance of volunteers throughout sional botanists, mainly located in Australia to compile a computerized capital cities. Atlas of Banksias.

The project is programmed to run for assistance with great success.

Department of Fisheries and Wildlife volunteers. has enabled the appointment of a national co-ordinator and a computer pro- the project, Mrs Anne Taylor, said there grammer to run the project.

They are based at the WA Wildlife these typically Australian plants. Research Centre at Wanneroo.

Atlas is based in WA because 57 of the start flowering, or how they respond to 72 named species occur in this State. fire.

The staff at the Research Centre have six years experience in running pilot that different species prefer will be plant atlas projects aimed at developing useful both to horticulturalists growing suitable systems for a project like the National Banksia Atlas.

The project is involving interested plants into their gardens. people throughout Australia in recorbiology of banksias.

ed by computer.

The role of volunteers in assisting in the collection of scientific data is particularly relevant in Australia which has The survey will rely almost entirely on only a relatively small number of profes-

Other projects have used volunteer

The Atlas of Australian Birds was Joint funding by the Australian organized by the Royal Australasian Or-Biological Resources Study and the WA nithologists Union using about 3000

> The botanist appointed to co-ordinate was still a great deal to be learnt about

She said it was not known how some It is appropriate that the Banksia species are pollinated, at what age they

> Information gathered on the habitats Banksias for the cut flower trade and to gardeners wishing to introduce these

Anyone wishing to participate in the ding the distribution, habitat and project can contact Anne Taylor at the WA Wildlife Research Centre, PO Box Information will be sorted and analys- 51, Wanneroo. Telephone: (09)

CALM Women show success in careers

CALM is known as a progressive employer of people with talent and expertise.

It's also an equal employment opportunity employer, with active support for women, Indigenous people, people with disabilities, people of diverse backgrounds and other groups.

March 8 was International Women's Day. This month Conservation News celebrates not only CALM's twentieth anniversary, but its commitment to equal employment opportunity with these stories about the paths of five women with outstanding careers.

Journalism led to CALM path

WHEN Caris Bailey embarked on a career in journalism she was not sure where it would

In fact, it has taken her from a metropolitan daily newspaper in Perth, newspapers in England and presenting the news on ABC TV.

It has also paved the way for a successful 18-year public service career.

"I wasn't sure where I would end up, but I knew journalism was a career that could lead to many different things," she said.

"All along, my ability to source information, talk to people and develop ideas has been made easier by my experience as a journalist."

Caris, who is now Publications and eMedia Coordinator in the Strategic Development and Corporate Affairs Division, was the first woman to hold a long-term position on the Department's Corporate Executive, albeit in two acting director roles.

She said she had always enjoyed support from her CALM colleagues and believed everyone should be given the same workplace opportunities.



First female national park ranger



ANNIE Greig fondly remembers how becoming CALM's first female national park Ranger in 1988 made news in the local daily newspaper.

"I made page 15 of The West Australian!" said Annie, who is now a Parks and Visitors Service Project

Seventeen years on, she knows it was the right career choice.

"Even as a little kid I wanted to work with plants and animals," she said.

Annie had almost completed a secondary teacher training course in the 1980s and was employed as a qualified horticulturist when she answered a newspaper job advertisement for trainee rangers which set her on a CALM career

"I loved it," she said of her eight years as a national park ranger at John Forrest National Park, Cape Le Grand National Park and Yanchep National Park.

"The best thing about it was the people I met and helping them to experience the special places in Western

Fun and challenge at work

KIMBERLEY Regional Manager Gae Mackay says her job is every bit as challenging as she knew it would be.

"However, it's also far more rewarding and even more fun than I ever expected it could be!" said Melbourne-born Gae, mother of four and CALM's first female Regional Manager.

Gae, who started in April last year after six years of working in a variety of operational and policy roles in CALM, believes she brings good people skills, particularly communications and listening skills to her job.

"I believe that perhaps my greatest 'advantage' that I possess as a woman operating in a male-dominated field, is the element of surprise," she said.

"Because of the scarcity of women in senior Kimberley positions, there are many 'blokes' that do not know what to expect from me. That can definitely work in my favour!"

Gae, a former teacher, ranger and recreation specialist, said that juggling family and work life could be hard.

"As with everything, the important part is to balance work and family commitments. And having a very supportive family and an understanding work force makes the juggling act easier to deal with."



Variety is the spice of work

CALM wildlife officer Pauline Southgate.

of the job, says the 27-year-

In a single day, she may deal with enforcement issues the public about ducks in

She is currently the



Great respect for environment



GROWING up on a farm in Devon, England helped shape Rebecca Carter's conservation values.

The Moora District Nature Conservation Coordinator said her farm life taught her to respect the environment.

"I'm passionate about instilling this ethic to others," she said.

Rebecca was the Department's first female graduate recruit and graduated from the program in 1996.

With two Bachelor of Science degrees one in environmental science and the other in population resource and technology - Rebecca's first CALM appointment was with the Merredin District as a Reserves Officer.

She's also been the Moora District Flora Conservation Officer, plus worked in natural resource management outside the Department for six years before returning in 2002.

The 31-year-old loves her job because it offers variety, teamwork, challenges and the chance to work outdoors.

The Department's June Craig Award honours the achievements of women. Recipients of the award are:

2000

June Ellis Carol Dymond Dr Jay Gomboso Donna Green Elizabeth Moore

2001

Christine Gilbert Jennie Cary Dr Jay Gomboso Anne Cochrane Ann-marie O'Callaghan

2002

Tammie Reid Ingrid Hunt Cheryl Cowell Laura Beck. Dr Margaret Byrne

2003

Brenda Smith Tiffany Aberin Kath White Stella King Chontarle Pitulej Leonie Monks

2004 Alicia Taylor



Conservation Officer Gina Broun and Nambung National Park Maintenance Worker Ken Howes release a quenda.

CALM and Tiwest join forces for quenda

THIRTY quenda (or southern brown bandicoots) have been reintroduced into Nambung National Park as part of CALM's Western Shield wildlife recovery program.

With the aid of major sponsor, Tiwest Joint Venture, the quenda joined the woylies and tammar wallabies reintroduced to Nambung National Park during the past 12 months in a bid to re-establish the original fauna.

Tiwest will continue its support by sponsoring 1080 fox baiting to protect the reintroduced animals - an action that will pave the way for future reintroductions of other native mammals that used to live in the area.

The quenda, Isoodon obesulus, is found throughout WA's south-west. It survives in some parts of Perth but is progressively declining in others because of urban development and diminishing habitat.

Under Western Shield, quenda are being relocated from development sites to suitable baited areas to establish secure populations.

Quenda weigh between 400 and 2000 grams, are light to dark brown in colour, have short wiry fur, large eyes, small round ears and a long nose.

They have powerful foreclaws to dig for invertebrates at night, sleeping in their ground grass and plant nests during the day. Quenda prefer to live in areas of low, scrub vegetation, parts of which are burnt from time to time. In Nambung National Park, unburnt areas offer shelter from predators while adjoining burnt areas supply an abundant and diverse food source.

Quenda are opportunistic breeders. They can produce as many as three litters in a year, which can vary from one to four young, depending on the availability of water and food in the area. They may live up to five years.

Bushland Benefits boosts rural conservation

BUSHLAND Benefits is a new CALMrun program that aims to help landholders meet the initial costs of managing bushland that is under voluntary conservation protection.

landholders with remnant native

Conservation briefs

Fuming herbarium...

The WA Herbarium will be closed for fumigation between 23 and 28 March, reopening for business on 29 March.

The specimen vaults will be closed from 21 March to 3 April.

The Reference Herbarium will be closed from 21 to 30 March.

All aboard for Tasmania's wilderness

A love of sailing turned into a lifetime adventure for CALM Project Officer Matt Wardell and his wife Gill when they sailed to Tasmania and back.

Leaving on November 15 last year, they spent three months battling swells of up to six metres and strong currents, surviving on dried and canned foods and perishables of cabbage, pumpkin and potatoes.

"The boat didn't have a fridge but it did have an oven, so we could make fresh bread, scones and cakes," Matt said.

The first leg of the journey was from Fremantle to Dunsborough, where they saw numerous migrating whales and dolphins.

The next part was the 15-day crossing of the Southern Ocean to Strahan on Tasmania's west coast, sailing up to 400 nautical miles offshore to catch the westerly winds of the roaring forties - latitude 40° South.

There were few whales or dolphins sighted in the deep ocean - but this was compensated for by a fascinating array of seabirds.

Once at Tasmania they took shorter trips up the pristine Gordon and Franklin rivers and to Port Davey in the Southwest Conservation Area, with its spectacular isolated coastline and natural harbour not accessible by road.

"We then went around the south-west cape of Tasmania, which was awe inspiring with its huge granite rocks, overcast skies, huge fur seals, dolphins, penguins, seabirds and muttonbirds, before arriving at Hobart for Christmas and New Year," he said.

After watching the Sydney to Hobart yachts arrive, they sailed from Storm Bay to Wineglass Bay in Freycinet National Park before heading through Bass Strait to King Island.

They sailed across the rest of Bass Strait to Apollo Bay in Victoria, battling strong westerly currents. The next stop was Port Fairy in Victoria before they headed northwest along the South Australian coast.

After 10 days they arrived at the Recherche Archipelago in Cape Arid National Park, near Esperance, where - after negotiating unmapped reefs for an anchorage - they spent four days at Middle Island enjoying the marine life.

From there they sailed to Albany, stopping

for three days before heading to Cape Leeuwin and a night at Eagle Bay before the last leg to Fremantle.

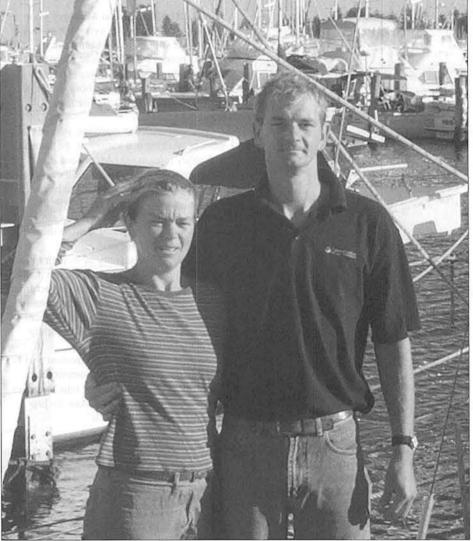
"With work looming we got back into the harbour at 7pm on Friday and I had to be at work on Monday after cleaning the boat all weekend!" Matt said.

"The trip was fantastic and spectacular... We learned a lot about ourselves, where we were going in our lives and about marine

life," Matt said.

Matt studied environmental science before migrating to Australia from England. After working as a boat builder and a tree surgeon, he completed a postgraduate diploma in environmental management at Murdoch University and was accepted into CALM's Graduate Recruit Program in 2003.

He is a Project Officer for Parks and Visitor Services in the Swan Region.



Matt Wardell and his wife Gill with their yacht Wooshee at Fremantle Harbour.

Staff changes . . . Staff changes . . . Staff changes . . .

Jennifer Jackson, Technical Officer, Woodvale Research Centre; Robyn Nicholas, Regional Biodiversity Facilitator, Midwest Region, Geraldton; Laurence Jose Radin, Nature Conservation Officer, Wellington District, Collie; Clare Martin, Senior Graphic Designer, Cygnet Hall, Crawley; Leah Stratford, Technical Officer, Wildlife Research Centre, Woodvale; Gavan Mullan, Revegetation Development Officer, Midwest Region, Geraldton; John Huisman, Research Scientist, WA Herbarium; Melissa Patterson, Project Officer, Strategic Development and Corporate Affairs, Kensington; Catherine Page, Resource Assistant, Forest Management Branch, Manjimup.

Cressida Wilson, Executive Officer, Wildlife Branch, Roadside Conservation, Kensington; Daniella Hanf, Field Officer, South West Region, Bunbury; Ryan Scott, Web Author, Strategic Development and Corporate Affairs, Cygnet Hall; Steve Altham, Manager Nearer to Nature, Mundaring.

Promotion

Glenn Willmott, Senior Ranger, Blackwood District, Busselton; Leslie Young, Project Officer Reporting and Budgeting, Financial Services, Kensington; Peter Gibson, District Fire Coordinator, Fire Management Services, Collie; Chantal Laval, Project Officer, People Services, Kensington.

Secondment

Nicholas Woolfrey, Project Officer, Department of Environment to Environmental Protection Branch, Nature Conservation Division, Kensington.

Temporary deployment

Richard Reid, Nature Conservation Officer, Swan Region, Swan Coastal District, Wanneroo.

Resignation

Jelena May, Nature Conservation Officer, Corporate Headquarters, Crawley; Brian Vincent, Nature Conservation Officer, Swan Coastal District, Wanneroo; Stacey Johnson, Senior Clerk, Information Management Branch, Kensington.